

# **Environmental Assessment for the Construction and Operation of a Shopping Center at Kirtland Air Force Base, Albuquerque, Bernalillo County, New Mexico**

**FINAL**  
*September 2010*



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## Acronyms and Abbreviations

|                   |  |
|-------------------|--|
| 1999 Study, the   | <i>Final Clean Air Act Transportation Intermodal Study, Phase I – Existing Condition Traffic Analysis Report</i> |
| AAFES             | Army and Air Force Exchange Service  |
| ABW               | Air Base Wing  |
| AFB               | Air Force Base   |
| AFI               | Air Force Instruction  |
| AFMC              | Air Force Materiel Command   |
| Base, the         | Kirtland Air Force Base; <i>also</i> Kirtland AFB <i>or</i> the Installation                                     |
| BMP               | best management practice   |
| BX                | Base Exchange  |
| CEQ               | Council on Environmental Quality   |
| CFR               | Code of Federal Regulations  |
| CH <sub>4</sub>   | methane  |
| CO                | carbon monoxide  |
| CO <sub>2</sub>   | carbon dioxide   |
| CO <sub>2EQ</sub> | carbon dioxide equivalent  |
| dB                | decibels   |
| dBA               | A-weighted decibels  |
| DeCA              | Defense Commissary Agency  |
| DNL               | day-night average sound level; <i>also</i> Ldn   |
| EA                | Environmental Assessment   |
| EO                | Executive Order  |
| FONSI             | Finding of No Significant Impact   |
| General Plan, the | <i>Kirtland AFB Comprehensive General Plan</i>   |
| GWP               | Global Warming Potential   |
| HWMP              | Hazardous Waste Management Plan  |
| Installation, the | Kirtland Air Force Base <i>or</i> Kirtland AFB; <i>also</i> the Base   |
| IPCC              | Intergovernmental Panel on Climate Change  |
| ITE               | Institute of Transportation Engineers  |



|                   |  |
|-------------------|--|
| KCF               | kilo (thousand) cubic feet   |
| Kirtland AFB      | Kirtland Air Force Base; <i>also</i> the Base <i>or</i> the Installation |
| LEED              | Leadership in Energy and Environmental Design                            |
| L <sub>eq</sub>   | equivalent continuous noise level  |
| LOS               | level of service   |
| MBTA              | Migratory Bird Treaty Act  |
| MCSS              | military clothing sales store  |
| mgd               | million gallons per day  |
| MS4               | Municipalities with Separate Storm Sewer Systems                         |
| NCO               | noncommissioned officer  |
| NO <sub>2</sub>   | nitrogen dioxide   |
| N <sub>2</sub> O  | nitrous oxide  |
| NAAQS             | National Ambient Air Quality Standards                                   |
| NC                | New Construction   |
| NEPA              | National Environmental Policy Act  |
| NMAC              | New Mexico Administrative Code   |
| NMED              | New Mexico Environment Department  |
| N <sub>2</sub> O  | nitrous oxides   |
| NO <sub>2</sub>   | nitrogen dioxide   |
| NOI               | Notice of Intent`  |
| NO <sub>x</sub>   | nitrogen oxides  |
| NPDES             | National Pollutant Discharge Elimination System                          |
| O <sub>3</sub>    | ozone  |
| Pb                | lead   |
| PM <sub>10</sub>  | particulate matter 10 microns or less in diameter                        |
| PM <sub>2.5</sub> | particulate matter less than 2.5 microns in diameter                     |
| PSD               | Prevention of Significant Deterioration                                  |
| SIP               | State Implementation Plan  |
| SO <sub>2</sub>   | sulfur dioxide   |
| SOW               | Special Operations Wing  |
| SPCC              | spill prevention, control, and countermeasures                           |
| SPL               | sound pressure level   |
| SWPPP             | stormwater pollution prevention plan                                     |

|        |   |
|--------|---|
| tpy    | tons per year                                 |
| U.S.C. | United States Code                            |
| USAF   | United States Air Force                       |
| USEPA  | United States Environmental Protection Agency |
| VOC    | volatile organic compound                     |
| VOQ    | visiting officers' quarters                   |

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# 1 Purpose and Need for the Action

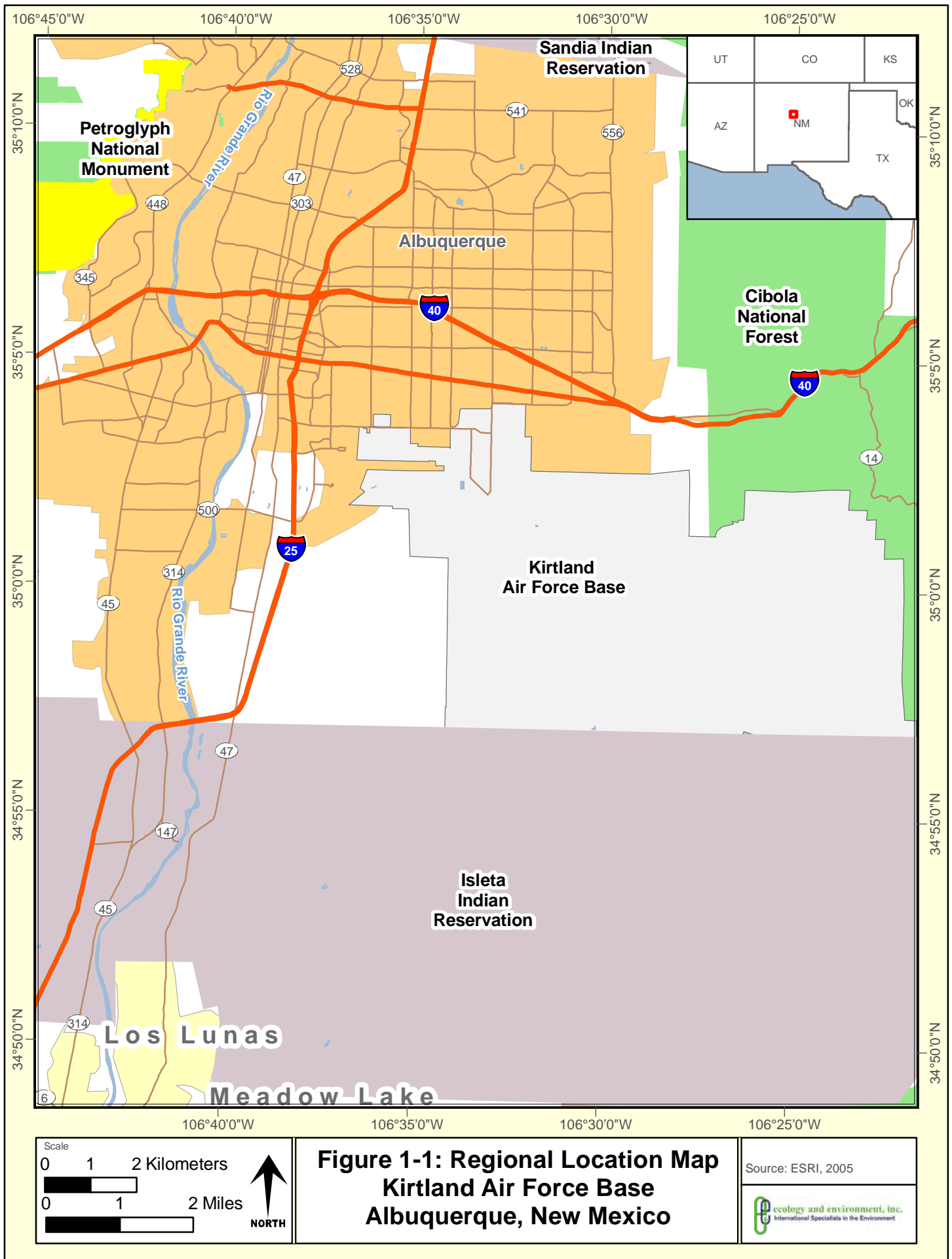
## 1.1 Introduction and Background

The Army and Air Force Exchange Service (AAFES) proposes to construct and operate a new Shopping Center at Kirtland Air Force Base (Kirtland AFB; *also referred to herein as the Base or the Installation*) in Albuquerque, Bernalillo County, New Mexico (Figure 1-1). This Environmental Assessment (EA) addresses the potential impacts related to the construction and operation of the new facility, demolition of the existing satellite pharmacy, closure of a portion of Pennsylvania Street, construction of the new Texas Street by-pass behind the existing Base Exchange (BX). In addition, this report identifies regulatory requirements and mitigation measures to minimize the potential environmental consequences associated with the implementation of the Proposed Action. This EA does not address the temporary relocation of the satellite pharmacy or the final disposition of the existing AAFES facilities (Building 20170 [existing BX] and Building 20224 [Mini Mall]). However, it is understood, that upon completion of the Proposed Action, the existing BX and Mini Mall would be turned over to the Base, but the future use of these facilities has not been determined.

Kirtland AFB is the sixth-largest U.S. Air Force Base, encompassing approximately 52,000 acres. The 377th Air Base Wing (ABW) of the Air Force Materiel Command (AFMC) is the host unit, whose mission is to provide world-class nuclear surety, expeditionary forces, and support to Base operations. The 377th ABW hosts more than 76 federal government and 100 mission partners.

## 1.2 Purpose and Need for the Proposed Action

The purpose of the action is to better serve the needs of the military community through the improvement of shopping and other services. The proposed project would consolidate two aged and obsolete facilities. The existing AAFES BX facility (Building 20170) was constructed in 1977 and is unable to adequately satisfy the Base demand for retail and food services. The existing BX's services mall is narrow and cannot accommodate short-term concession kiosks, and the food court is currently undersized with limited seating. The facility is currently undersized for the sales volume, and the age of the existing facility is such that building upgrades cannot be accomplished to meet current building standards. The existing Mini Mall (Building 20224) was constructed in 1956, is located outside the community services area, and is in poor condition. Construction of a new Shopping Center would increase the facility size and enhance customer convenience while reducing overall operational costs.



***1 Purpose and Need for the Action***

Further, Base personnel would benefit from collocation of AAFES services, creating a one-stop shopping experience.

The new Shopping Center would include a main store, military clothing sales store (MCSS), pharmacy, and retail laundry/drycleaning services, a beauty/barber shop, concession kiosks, other similar services, and a food court including Taco Bell, Charley's, Anthony's, Manchu Wok, and Starbucks. Laundry/drycleaning services would be retail in nature, providing drop-off and pick-up of laundry, while actual drycleaning activities would be conducted off site.

The need for this action is to provide consolidated, centrally located facilities on Kirtland AFB where authorized customers could obtain multiple services at a single location. This would reduce the need to travel off Base and allow customers to make a single stop for multiple services on the Installation. In addition, collocating services would increase energy efficiency and reduce overall operational costs.

## **1.3 Decision to be Made**

The United States Air Force (USAF) must decide, based on the analyses contained herein, whether a Finding of No Significant Impact (FONSI) is applicable or preparation of an environmental impact statement (EIS) is required, or if no action will be taken.

Under the National Environmental Policy Act (NEPA), federal agencies are required to consider the environmental consequences of proposed actions during the decision-making process. The intent of NEPA is to foster and promote general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans. The Council on Environmental Quality (CEQ) was established under NEPA to guide the implementation of the NEPA process and, in 1978, issued regulations towards this end (Title 40 Code of Federal Regulations [CFR] Parts 1500 through 1508).

## **1.4 Applicable Regulatory Requirements**

NEPA (Public Law [P.L.] 91-190, 42 United States Code [U.S.C.] §4321 et. seq.) is a mandate for federal agencies to conduct a systematic, interdisciplinary approach to environmental planning and decision making. Under NEPA, a federal agency's proposed actions can either be "categorically excluded" from further analysis or evaluated in an EA or an EIS. An EA is a concise public document intended to provide agency decision makers with sufficient information and analysis

***1 Purpose and Need for the Action***

to determine whether to prepare an EIS. An EA thus results in either a FONSI or a decision to prepare an EIS. An EIS is required for federal actions that may significantly affect the quality of the human environment. The intent of NEPA is to minimize adverse impacts to the human environment through information availability, the development of alternative actions, and the implementation of mitigation measures.

This EA was prepared in accordance with NEPA; the CEQ regulations implementing NEPA (40 CFR §§1500-1508); and the USAF “Environmental Impact Analysis Process” (Air Force Instruction 32-7061 as promulgated by 32 CFR Part 989).

Other environmental regulatory requirements relevant to the Proposed Action include, but are not limited to:

- Archeological Protection Act, 16 U.S.C 470 et. seq.;
- Clean Air Act, 42 U.S.C. 7401 et. seq.;
- Clean Water Act, 33 U.S.C. 1251 et. seq.;
- Endangered Species Act, 16 U.S.C. 1531 et. seq.;
- Energy Independence and Security Act, 42 U.S.C. 17094 et. seq.;
- Migratory Bird Treaty Act, 16 U.S.C. 703 et. seq.;
- National Historic Preservation Act, 16 U.S.C. 470 et. seq.;
- Noise Control Act, 42 U.S.C. 4901 et. seq.;
- Occupational Safety and Health Act, 29 U.S.C. 651 et. seq.;
- Pollution Prevention Act, 42 U.S.C. 13101 et. seq.;
- Resource Conservation and Recovery Act, 42 U.S.C. 6901 et. seq.; and
- Toxic Substances Control Act, 15 U.S.C. 2601 et. seq.

In addition, the Proposed Action must comply with a number of Executive Orders (EOs), including:

- EO 11514, Protection and Enhancement of Environmental Quality;
- EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations;
- EO 13045, Protection of Children from Environmental Health Risks and Safety Risks;
- EO 13175, Consultation and Coordination with Indian Tribal Governments; and
- EO 13186, Responsibilities of Federal Agencies to Protect Migratory Birds.

## Kirtland Air Force Base Environmental Assessment

### 1 Purpose and Need for the Action

Table 1-1 lists additional permits, guidelines, and planning documents that may require consideration and/or compliance.

| <b>Table 1-1<br/>Environmental, Safety, and Health Compliance Requirements</b>  |   |   |
|---|---|---|
| <b>Source</b>   | <b>Responsible Entity</b>                   | <b>Requirement</b>  |
| Kirtland Air Force Base (AFB) Comprehensive Plan - General Plan   | Kirtland AFB                                | Consistency   |
| Kirtland AFB Architectural Compatibility Plan   | Kirtland AFB                                | Consistency   |
| Kirtland AFB Hazardous Waste Management Plan  | Kirtland AFB                                | Consistency   |
| Kirtland AFB Spill Prevention Control and Countermeasures (SPCC) Plan   | Kirtland AFB                                | Consistency   |
| Kirtland AFB Integrated Natural Resources Management Plan   | Kirtland AFB                                | Consistency   |
| Kirtland AFB Integrated Cultural Resources Management Plan (includes compliance with the Kirtland AFB inadvertent discovery procedures) | Kirtland AFB                                | Consistency   |
| Albuquerque Bernalillo County Water Utility Authority Wastewater Discharge Permit   | Kirtland AFB                                | Consistency   |
| Kirtland AFB Prairie Dog Management Program   | Kirtland AFB                                | Consistency   |
| National Pollutant Discharge Elimination System (NPDES) Construction General Permit   | Army and Air Force Exchange Service (AAFES) | Preparation and submittal of Notice of Intent (NOI), preparation of a Stormwater Pollution Prevention Plan (SWPPP), and a Notice of Termination (NOT)   |
| City of Albuquerque Environmental Health Department, Air Quality Division   | AAFES                                       | Preparation and submittal of a Fugitive Dust Control Construction Permit application to the City within 10 business days prior to construction. It should be noted that the Contractor must submit the Fugitive Dust Control Permit application to the 377 MSG/CEANC at least one month prior to anticipated ground disturbance for appropriate signature. No active operations shall commence until a department manager, supervisor, scientist, field operations officer, or health specialist signs the Fugitive Dust Control Construction Permit and a copy of the signed permit is available at the site of active operations <sup>(a)</sup> |

Notes:

(a) See Appendix A of this Environmental Assessment.

## 1.5 Organization of the Document

This EA follows the format established in 32 CFR Part 989, the USAF guidelines for implementing the CEQ regulations (40 CFR §1502). Section 1 presents the purpose and need for the action. The alternatives, including the consideration of alternative sites for the Proposed Action, are



***1 Purpose and Need for the Action***

described in Section 2. The affected environment and environmental consequences are described in Section 3. Section 4 presents the distribution list for the EA and summarizes the qualifications of document preparers. Section 5 provides references used in the preparation of this EA. Other documents and resources used to supplement this EA are provided as appendices to this report.

## 2 Description of the Proposed Action and Alternatives

This section describes the Proposed Action, the site selection process, alternatives, and the Preferred Alternative. The No Action Alternative is carried forward for analysis as a baseline to which all other alternatives are compared in accordance with NEPA and CEQ implementing regulations 40 CFR Part 1502.14(d). Alternatives that do not support the purpose and need for the action as described in Section 1 are not considered to be feasible and are not described in detail in this EA.

### 2.1 Description of the Proposed Action

AAFES proposes to construct and operate a new Shopping Center at Kirtland AFB for use by authorized individuals. The Proposed Action would consist of the construction and operation of a new Shopping Center containing a main store, MCSS, pharmacy, retail laundry/drycleaning services, a beauty/barber shop, concession kiosks, other similar services, and a food court including Taco Bell, Charley's, Anthony's, Manchu Wok, and Starbucks.

Construction would consist of a reinforced concrete slab/foundation with steel or concrete framing, including complete mechanical, electrical, and life/safety systems. The proposed facility would be designed and built in accordance with Leadership in Energy and Environmental Design (LEED) Silver-New Construction (NC) standards. However, AAFES does not intend to pursue LEED-NC certification for this facility. The proposed facility would connect to existing utility services and communications systems and would provide for pavement, walks, curbs, gutters, storm drainage, retention walls, and other site improvements, as necessary. Laundry/drycleaning services would be retail in nature, providing drop-off and pick-up of laundry, while actual drycleaning activities would be conducted off site. New construction would be in accordance with all applicable Department of Defense Unified Facilities Criteria provisions. For purposes of impacts analyses, this EA assumes that demolition of the existing pharmacy and construction of the new Shopping Center is expected to last approximately 18 months.

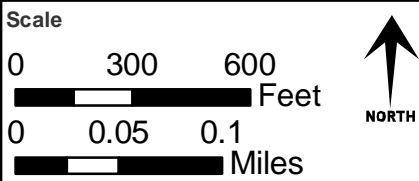
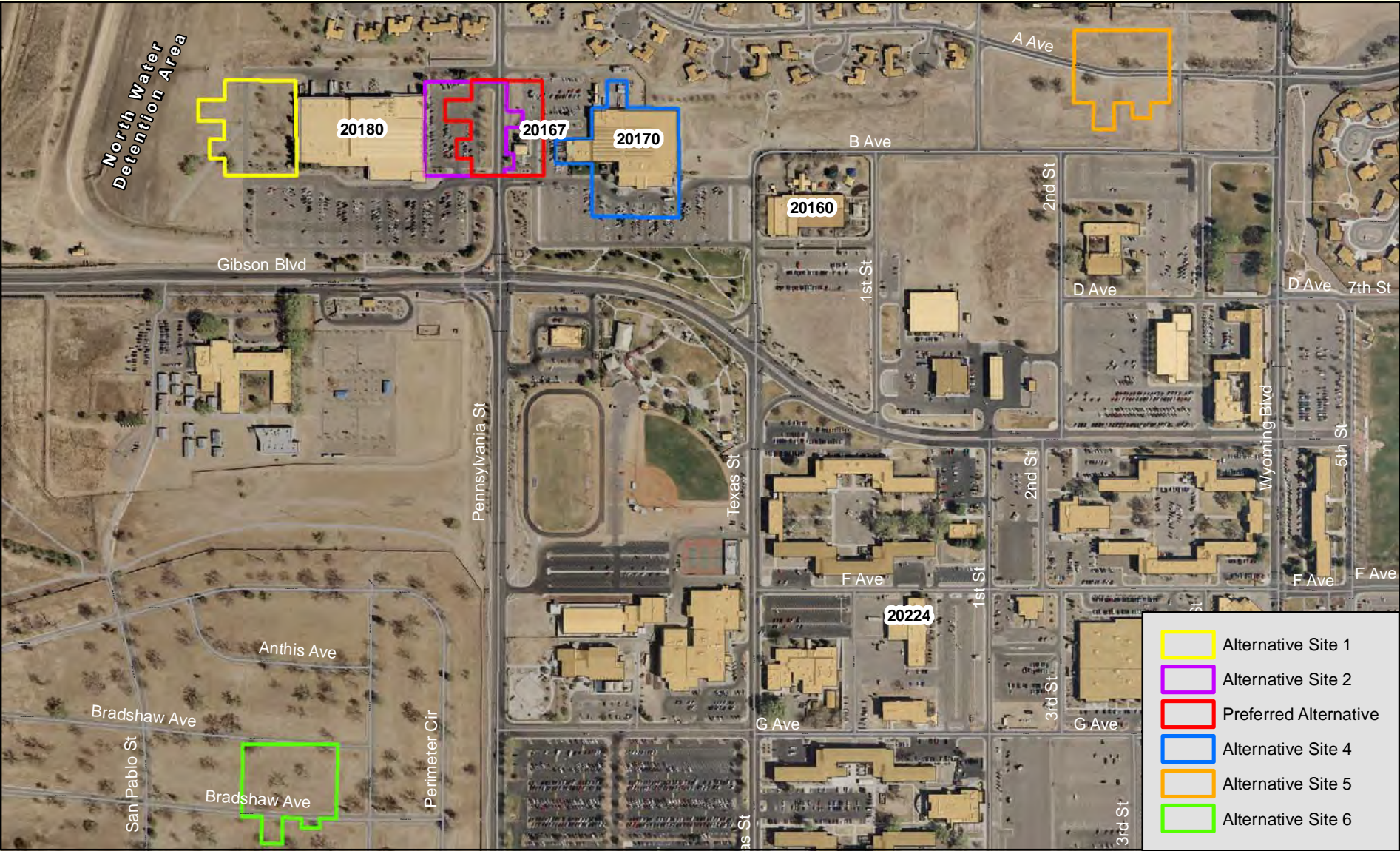
## 2.2 Alternatives Development Process

Proposed sites were identified according to the size of the parcel and the ability of the site to meet the alternatives selection criteria. Kirtland AFB planners and AAFES staff identified six alternatives (Figure 2-1) as potentially suitable for the development of the Proposed Action.

### 2.2.1 Site-Selection Criteria

In accordance with 32 CFR Part 989.8(c), the development of site selection criteria is an effective mechanism for the identification, comparison, and evaluation of reasonable alternatives. The following site-selection criteria were developed to be consistent with the purpose and need for the action and to address pertinent environmental, safety, and health factors. These site-selection criteria were used to evaluate alternative sites for the Proposed Action and to identify reasonable alternatives for evaluation in this EA:

- **Consistent with AAFES Mission.** AAFES aims to provide adequate services to Base personnel in a timely and efficient manner through the establishment of central, collocated facilities with high visibility. The site must be located in a highly visible and accessible area of Kirtland AFB and design should allow for a pedestrian-oriented, one-stop shopping experience. Location of the AAFES services must be close to other AAFES and Defense Commissary Agency (DeCA) services. In addition, it must not encroach on existing services offered or interfere with any existing service's ability to expand.
- **Adequate Space and Infrastructure to Accommodate New Facilities.** The site must provide adequate developable land to accommodate the Proposed Action. The building footprint would require approximately 2.2 acres (95,421 square feet), and additional space would be needed for security setbacks unless mitigation measures are taken. In addition, the site must provide safe and efficient connectivity to existing infrastructure (i.e., utilities).
- **Comply with the *Kirtland AFB Comprehensive General Plan*.** Construction of the new AAFES facility must not conflict with Kirtland AFB's long-range development plans. New development must be consistent with the 2002 *Kirtland AFB Comprehensive General Plan* (hereinafter referred to as 'the General Plan'), giving adequate consideration to the existing functional relationships that support the mission. The site must be located within the Community area as defined in the Future Land Use Plan of the General Plan. Further, the site must promote infill development by utilizing currently developed parcels, and avoiding the development of currently vacant parcels in accordance with the goals of Section 2.1 of the General Plan (Kirtland AFB 2002).
- **Safe and Efficient Traffic Flow.** The site must allow for safe vehicular access and provide minimal impacts on existing traffic flow at Kirtland AFB. The site must be located close to a Base access gate to allow convenient utilization by authorized off-Base patrons, without creating substantial additional trips within and across the Base.



**Figure 2-1: Alternative Site Locations**  
**Kirtland Air Force Base**  
**Albuquerque, New Mexico**

Source: Kirtland AFB, 2008

## **2.2.2 Alternatives**

The following sections describe the proposed alternative sites and the ability to meet the site-selection criteria. In general, Alternatives 1, 2, 4, 5, and 6 do not meet all the proposed site-selection criteria and have been eliminated from further consideration. Only Alternative 3 meets all the site-selection criteria; therefore, only Alternative 3 and the No Action Alternative are described in further detail in this EA.

### **Alternative 1**

The Alternative 1 site would be attached to the western side of the existing Commissary (Figure 2-1). A portion of the Alternative 1 site would be located within the North Water Detention Area that services the existing Commissary and BX shopping area and is adjacent to the Base fence line. As such, the developable land area immediately adjacent to and west of the Commissary is limited to approximately 1.4 acres (59,402 square feet). This detention basin is managed by the City of Albuquerque and helps ensure compliance with the Municipalities with Separate Storm Sewer Systems (MS4) permit. This site has insufficient land area to accommodate the Proposed Action unless the North Water Detention Area is altered. Altering this drainage basin would result in the potential reduction of drainage capacity potentially causing flooding and negatively impacting Kirtland AFB's stormwater program. The existing and future land uses for the site are designated as part of the Community area in the General Plan, making the Proposed Action at the Alternative 1 site consistent with the General Plan (Kirtland AFB 2002).

While this site offers a central location desired by AAFES and Base personnel, the location would require all traffic to use Pennsylvania Street and filter through the existing Commissary parking lot for site access. This would likely result in traffic congestion and an unsafe pedestrian environment around the Commissary and proposed Shopping Center, as well as the existing BX. While Alternative 1 would allow for the collocation of services, the proposed Shopping Center and existing Commissary would be separated from the existing BX facility by Pennsylvania Street, further creating an unsafe pedestrian environment. In addition, this parcel is currently undeveloped. Therefore, Alternative 1 is eliminated from further consideration in this EA.

### **Alternative 2**

The Alternative 2 site is between the existing Commissary (Building 20180) and existing BX (Building 20170) on a parcel of sufficient size to accommodate the proposed 95,421-square-foot building (Figure 2-1). The existing and future land uses for the site are designated as part of the Community area in the General Plan, making the Proposed Action at the Alternative 2 site consistent

with the General Plan (Kirtland AFB 2002). The proposed facility would be attached to the east side of the existing Commissary and would eliminate an existing parking area and a portion of Pennsylvania Street. This alternative would result in the shifting of Pennsylvania Street to the east so that the road would still bisect the shopping area. The site is located adjacent to and west of the Preferred Alternative (Alternative 3) site.

This site offers a central, highly visible location desired by AAFES and Base personnel, access to infrastructure required by the project, and would be consistent with Kirtland AFB General Plan. While Alternative 2 would allow for the collocation of services, siting at this location would minimize environmental impacts because the site is currently developed. However, the proposed Shopping Center and existing Commissary would be separated from the existing BX facility by Pennsylvania Street, perpetuating an unsafe pedestrian environment and potentially resulting in traffic congestion. Therefore, Alternative 2 is eliminated from further consideration in this EA.

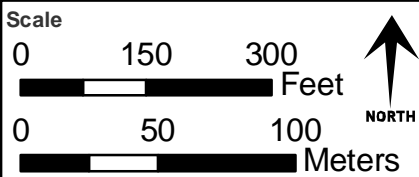
### **Alternative 3**

The Alternative 3 (Preferred Alternative) site is approximately 2.3 acres. The existing and future land uses for the site are designated as part of the Community area in the General Plan, making the Proposed Action at the Alternative 3 site consistent with the General Plan (Kirtland AFB 2002). The site is located between the existing Commissary (Building 20180) and existing BX (Building 20170) on a portion of Pennsylvania Street (Figures 2-1 and 2-2). The site is located adjacent to and east of the Alternative 2 site. Alternative 3 would necessitate the demolition of the approximately 1,540-square foot existing satellite pharmacy (Building 20167), closure of a portion (approximately 345 feet) of Pennsylvania Street, and construction of approximately 492 feet of new road to connect Texas Street with Pennsylvania Street north of the new Shopping Center.

This site would provide the central, highly visible location desired by AAFES and Base personnel, would be in compliance with the existing and future land use plans of the General Plan, and would be compatible with other current and future projects. In addition, the facility site would provide connectivity to existing utility services and enough space to accommodate the new Shopping Center and security setbacks.

The site is located near the Gibson Gate, eliminating the need for off-Base personnel to travel across the Base to access AAFES services, resulting in limited additional trips on the Base road network. The Proposed Action includes construction of a new road behind the existing BX and proposed Shopping Center that could be used for deliveries and serve as an access road to the Pershing Park Housing area. The resulting development would allow for the collocation of shopping and services in a pedestrian-friendly, one-stop-shop environment, and would serve as infill





**Figure 2-2: Preferred Alternative  
Kirtland Air Force Base  
Albuquerque, New Mexico**

Source: Kirtland AFB, 2008

development on a currently developed site minimizing environmental impacts to undeveloped parcels. This alternative is discussed in detail in this EA.

#### **Alternative 4**

Alternative 4 would involve interior renovation of the existing BX in addition to an expansion that would extend into the existing parking area south of the BX (Figure 2-1). The existing and future land uses for the site are designated as part of the Community area in the General Plan, making the Proposed Action at the Alternative 4 site consistent with the General Plan (Kirtland AFB 2002).

This site offers a central, highly visible location desired by AAFES and Base personnel, access to infrastructure required by the project, and would be consistent with the General Plan. Additionally, the site is currently developed and would not result in the development of any currently vacant land.

Due to the age and configuration of the interior space of the existing BX, renovations and expansion would not accommodate the design requirements of the new Shopping Center and would be insufficient to meet the AAFES mission. While Alternative 4 would allow for the collocation of services, the proposed Shopping Center and existing Commissary would still be separated by Pennsylvania Street, resulting in an unsafe pedestrian environment. Therefore, Alternative 4 is eliminated from further consideration in this EA.

#### **Alternative 5**

This site is inconsistent with the Future Land Use Plan for this area. This site does not offer a central, highly visible location desired by AAFES and Base personnel and would require relocation of other community services to the same area to meet the collocation siting criteria; DeCA does not anticipate relocating to this area. This site would require the development of a currently vacant parcel (Figure 2-1), and the existing and future land uses for the site are designated as Administration/Research which would make the Proposed Action at the Alternative 5 site inconsistent with the General Plan (Kirtland AFB 2002). Further, Site 5 is located near the 24/7 Wyoming Gate and would be convenient to personnel in Base housing. Implementation of the Proposed Action at the Alternative 5 site could result in increased traffic congestion on-Base. This increase in traffic volume would be more easily accommodated by Gibson Boulevard, rather than Wyoming Boulevard, which is a two-lane roadway. Therefore, Alternative 5 is eliminated from further consideration in this EA.



**Alternative 6**

The existing land use for this site is designated as Military Family Housing in the General Plan; however, future land use designates the site as part of the Community area (Kirtland AFB 2002). The site, now vacant, was previously part of the Zia Housing area and is located approximately 0.28 mile (1,462 feet) south of the existing BX off Pennsylvania Street (Figure 2-1).

This site does not offer a central, highly visible location desired by AAFES and Base personnel and would require relocation of other community services to the same area to meet the collocation siting criteria. With existing land use designated as Military Family Housing and the future land use as Community, the Proposed Action at the Alternative 6 site would be inconsistent with the current designated use of the land, but would be consistent with anticipated future development. Additionally, this site is not conveniently located adjacent to a Base access gate, would increase distances traveled by authorized off-Base personnel, and would require development of a currently vacant parcel. Therefore, Alternative 6 is eliminated from further consideration in this EA.

| <b>Table 2-1</b>   |   |                                 |                                 |  |
|--|---|---------------------------------|---------------------------------|--|
| <b>Comparison of Alternative Sites for the Proposed Action</b> |   |                                 |                                 |  |
| <b>Alternative Site Locations</b>                              | <b>Selection Criteria</b>                               |                                 |                                 |  |
|  | <b>AAFES Mission, High Visibility and Accessibility</b> | <b>Space and Infrastructure</b> | <b>General Plan Consistency</b> | <b>Safe and Efficient Traffic Flow</b> |
| Alternative 1  | No  | No                              | Yes                             | No                                     |
| Alternative 2  | Yes   | No                              | Yes                             | No                                     |
| Alternative 3  | Yes   | Yes                             | Yes                             | Yes                                    |
| Alternative 4  | No  | No                              | Yes                             | Yes                                    |
| Alternative 5  | No  | Yes                             | No                              | No                                     |
| Alternative 6  | No  | Yes                             | No                              | No                                     |

**2.2.3 Alternatives Carried Forward for Further Analysis****Description of the Preferred Alternative**

The Proposed Action evaluated in this EA involves construction of a new 95,421-square-foot Shopping Center, demolition of the existing satellite pharmacy (Building 20167), closure of a portion of Pennsylvania Street, and construction of a new road behind the existing BX and proposed Shopping Center on the Preferred Alternative site (Alternative 3), as determined in Section 2.2 and illustrated on Figure 2-2. Underground utilities located beneath Pennsylvania Street and the proposed Shopping Center footprint include an 8-inch water line running north-south, 6-inch and 8-inch natural gas lines running north-south, 10-inch to 12-inch sanitary sewer mains running north-south, and 12-inch, 18-inch, and 36-inch storm drains running mainly east-west (Lee 2009). In addition, an abandoned water line and an abandoned gas line run the extent of the new Shopping Center footprint, and multiple operational underground communication manholes, ducts, and direct buried lines exist.

***2 Description of the Proposed Action and Alternatives***

These lines would be relocated as part of site preparation activities. Additionally, in order to mitigate the impacts of closing a portion of Pennsylvania Street (approximately 345 feet), the Preferred Alternative would include the construction of approximately 492 feet of new road to connect Texas Street with Pennsylvania Street north of the new Shopping Center, referred to herein as the Texas Street by-pass.

**No Action Alternative**

The CEQ regulations implementing NEPA require that a No Action Alternative be evaluated. Under the No Action Alternative, the existing facilities (BX [Building 20170], pharmacy [Building 20167], and Mini Mall [Building 20224]) would be used to provide AAFES and Base services. The existing AAFES BX facility (Building 20170), constructed in 1977, and the existing Mini Mall (Building 20224), constructed in 1956, are obsolete facilities in poor condition and are unable to adequately satisfy the Base demand for retail and food services. The age of the existing facilities are such that building upgrades cannot be accomplished to meet current building standards. Without the construction of a new modern shopping facility, the military community could shop at commercial establishments located off Installation more frequently.

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## 3 Affected Environment and Environmental Consequences

This section describes the existing natural and human environment that may be impacted by the implementation of the Proposed Action at the Preferred Alternative site or the No Action Alternative. This section also presents an analysis of the potential environmental consequences from the implementation of the Proposed Action at the Preferred Alternative site and the No Action Alternative on the existing natural and human environment.

### 3.1 Resources Eliminated From Further Analysis

In compliance with the guidelines contained in NEPA, CEQ regulations, and 32 CFR 989, this section is limited to the discussion of only those specific resources potentially affected by the implementation of the Proposed Action at the Preferred Alternative site. The following resources are not expected to be affected and, therefore, are not described in detail in this EA:

- **Land Use** would not be affected by the Proposed Action because compatibility with the General Plan was one of the site selection criteria. The Preferred Alternative site is currently designated as ‘Community’ on both the existing and Future Land Use Plan maps in the General Plan (Kirtland AFB 2002). ‘Community’ land use includes areas of both commercial and service functions including the BX, dining halls, service stations, and similar uses. Therefore, the location of this facility at the Preferred Alternative site is consistent with the General Plan and would not require a change in land use designation (Kirtland AFB 2002).
- **Air Space and Aircraft Operations** would not be affected by the Proposed Action. The number of aircraft and the airspace associated with aircraft operations at Kirtland AFB would not change. No proposed structures would penetrate into airspace or affect flight paths or patterns.
- **Climate** would not be affected by the Proposed Action. The level of impact of the Proposed Action on approximately 2.2 acres of land is not sufficient to cause a measurable change in climate. Therefore, no measurable changes in climate are expected as a result of the Proposed Action. Greenhouse gas emissions are evaluated in Section 3.5, “Air Quality.”

## **3.2 Traffic**

### **3.2.1 Affected Environment**

#### **Local Road Network**

Kirtland AFB, located southeast of the City of Albuquerque, lies approximately 4 miles east of Interstate 25 and 2 miles south of Interstate 40. Kirtland AFB is not directly served by any limited access expressways. However, the cantonment area is linked directly with the southeast Albuquerque street system primarily through connections with Gibson Boulevard on the west, Wyoming Boulevard on the north, and Eubank Boulevard on the east (Figure 1-1). Regionally, peak morning traffic travels inbound (toward central Albuquerque) and outbound (away from the central city) in the afternoon. Traffic congestion is most prevalent during the peak morning and afternoon hours near the junction of the interstate highways, at arterial intersections with the interstates, and on streets where urban conditions tend to slow traffic (Kirtland AFB 2000).

#### **Base Access**

Two entrance/exit gates are close to the preferred site location. The Gibson Gate is located approximately 100 feet east of the intersection of Gibson and Louisiana, immediately south of the existing Commissary on Gibson Boulevard, while the Wyoming gate is located northeast of the preferred site (Figure 2-1).

The most recent traffic analysis on Kirtland AFB was conducted March 13 through 19, 1999, for the Clean Air Act Transportation Intermodal Study (Kirtland AFB 1999). Data collected for the Clean Air Act Transportation Intermodal Study (the 1999 Study) concluded that 74% of the total daily traffic entering and exiting Kirtland AFB utilized the Gibson, Wyoming, and Eubank Gates, which primarily serve the east cantonment area. The Carlisle and Truman Gates serve the west cantonment area and are located approximately 200 feet south of Gibson Boulevard. The Contractor Gate, which is used by all contractors and deliveries accessing the Base, is located directly south of Gibson Boulevard on Kirtland Drive. Currently, all deliveries arriving on Base must use this gate to reach their intended destination.

#### **Installation Traffic Volume**

Kirtland AFB, being the largest employer in the Albuquerque area, is the principal destination for commuters in the southeastern side of the city. As a result, traffic converges on the gates during the morning and evening peak hours resulting in occasional queuing and congestion (Kirtland AFB 2000).

From June 3 through June 16, 2008, Base personnel conducted surveys of the Gibson, Wyoming, and Truman Gates. The survey of the Gibson Gate, which is open from 0500 to 2000 hours, revealed the peak inbound weekday traffic during the 0700 hour at 833 vehicles, and a peak outbound weekday traffic during the 1600 hour at 940 vehicles. In contrast, the survey of the Wyoming Gate revealed the peak inbound weekday traffic during the 0700 hour at 1,425 vehicles, and a peak outbound weekday traffic during the 1600 hour at 1,180 vehicles. As reflected in Table 3-1, the survey revealed that on average, the Wyoming Gate accommodates higher traffic volumes than the Gibson Gate.

| <b>Table 3-1</b>                            |               |                |
|---|---------------|----------------|
| <b>2008 Kirtland AFB Gate Volume Counts</b> |               |                |
|   | <b>Gibson</b> | <b>Wyoming</b> |
| Average inbound weekday                     | 5,784         | 11,670         |
| Average outbound weekday                    | 6,330         | 8,016          |
| Average inbound weekend                     | 1,996         | 8,093          |
| Average outbound weekend                    | 2,103         | 4,035          |

Source: Richardson 2009.

Counts were taken for Gibson, Wyoming, and Truman Gates only.

Other Base gate counts were not available.

## **Installation Traffic Flow and Circulation**

The eastern half of the cantonment area contains the greatest concentration of the Base population, including the majority of Base housing, administrative functions, and employment centers such as Sandia National Laboratories and the Department of Energy (Kirtland AFB 2000). The eastern cantonment area is primarily served by the Gibson, Wyoming, and Eubank Gates. Access to the preferred site of the Proposed Action is gained from the north or south via Pennsylvania Street, or from the east via Texas Street. Table 3-1 indicates that the Wyoming Gate accommodates more traffic than the Gibson Gate, while the 1999 Study concluded that the Eubank Gate accommodates twice as many vehicles in the morning peak hour as the Wyoming Gate. Although current counts of the Eubank Gate do not exist, it may be concluded from the information provided by Kirtland AFB that the Gibson Gate accommodates the least amount of traffic entering and exiting the eastern cantonment area of the Base.

No comprehensive traffic counts or studies to assess on-Base traffic flow have been conducted since the 1999 Study. The 1999 Study made recommendations to improve on-Base traffic flow and circulation including signalization improvements, widening of Wyoming Boulevard, and the addition of visitor lanes to the Eubank and Wyoming Gates (Kirtland AFB 1999). Many of these recommended and other improvements have been made in the eastern cantonment area and have improved traffic flow in the area since the 1999 Study (Watkins 2009).

### **3.2.2 Environmental Consequences**

#### **Preferred Alternative**

Implementation of the Preferred Alternative would not be expected to increase Base personnel and would not result in significant additional trips over the Kirtland AFB roadway network. The Preferred Alternative would however, result in the redistribution of trips already occurring over the network.

#### **Construction**

Implementation of the Proposed Action at the Preferred Alternative site location would result in the demolition and construction of facilities as well as the closure of a portion of Pennsylvania Avenue and construction of the Texas Street by-pass. Together, these activities would result in a minor increase in traffic volume within the proposed project area due to the presence of construction equipment, construction workforce vehicles, vehicles delivering construction and fill material, and vehicles removing demolition debris. Phasing of the demolition and construction activities associated with the Proposed Action would vary the size of the workforce and the associated number of daily trips, but would not be anticipated to exceed a total of 25 trips on a daily basis. The addition of these vehicle trips over the Kirtland AFB roadway network would not be expected to change the current level of service (LOS) of any Kirtland AFB roadways. Further, over the short-term, during demolition and construction, Kirtland AFB would experience minor, short-term road closures, detours, delays, and potential decreases in LOS in the immediate vicinity of the proposed project area. To minimize these minor, short-term adverse impacts, the contractor would schedule truck trips at intervals over the entire working day, thereby evenly distributing these trips over the existing roadways and avoiding peak-hour traffic times.

In addition to construction-related impacts in the immediate vicinity of the Proposed Action, all contractors and deliveries accessing Kirtland AFB must use the Contractor Gate at Kirtland Drive, located off Gibson Boulevard in the western cantonment area. This would increase contractor and delivery traffic traversing the Base between the Contractor Gate and the Preferred Alternative site location. This increase in delivery traffic would result in minor, short-term adverse impacts to the Base roadway network that would be mitigated through the encouragement of construction workers to carpool to the site and scheduling truck trips of construction vehicles, deliveries, and debris removal at intervals throughout the entire working day to avoid peak travel hours.

### **Operations**

Operation of the Proposed Action at the Preferred Alternative location would not increase the number of personnel at Kirtland AFB and would therefore not result in increased numbers of trips entering or exiting the Base, as these services are provided for on-Base personnel. Although trips entering and exiting the Base would not increase, on-Base trips would likely be redistributed over the existing roadway network, likely increasing the number of trips to the project area.

**Traffic Flow and Circulation.** As detailed in Section 2.1, the Proposed Action at the Preferred Alternative location would include the construction of the Texas Street by-pass to mitigate the closure of a portion of Pennsylvania Street. Upon completion of construction activities, traffic previously using Pennsylvania Street for deliveries to the shopping area and to access Base housing would be redistributed to the Texas Street by-pass or to one of the six various alternate access points serving this area of the Base (Figure 2-1). This minor traffic shift would not result in additional trips over the Base roadway network, would not affect LOS, and therefore would have no significant adverse impacts on the roadway network.

**Trip Generation.** Implementation of the Proposed Action would include the collocation of existing facilities (i.e., BX, Mini-Mall, and satellite pharmacy) into the new Shopping Center facility. Collocation of these facilities would provide a wider range of goods and services available at a single location. This collocation, coupled with the proximity to the Commissary, would create the opportunity for one-stop shopping, thereby increasing choice and reducing overall trip generation. Although lunch-hour traffic to the project area would likely increase due to the lack of dining options elsewhere on Base, this would also alleviate many on- and off-Base trips during the morning and evening peak hours since customers can perform multiple tasks in one trip. Similarly, the collocation of these facilities within the project area would result in a minor increase in delivery traffic due to the expansion in services being offered (i.e., new food vendors) and the consolidation of the Mini-Mall and pharmacy functions. Deliveries currently being made to the existing pharmacy and existing BX would not significantly change. However, deliveries currently being made to the Mini-Mall would be redistributed to the proposed project area, resulting in a minor, long-term adverse effect on traffic in the immediate vicinity of the proposed site. To minimize these minor, long-term adverse effects of the increase in delivery traffic, these deliveries would be scheduled during off-peak hours.

**Institute of Transportation Engineers (ITE) Trip Generation Analysis.** Due to the absence of Base traffic data, the number of vehicle-trips generated by the proposed use changes associated with implementation of the Proposed Action at the preferred site was estimated based on trip generation rates and information documented in *Trip Generation Seventh Edition, 2003* (ITE



***3 Affected Environment and Environmental Consequences***

2003). The purpose of this analysis is to provide a worst-case scenario of the potential change in on-Base trips as a result of the Proposed Action at the Preferred Alternative location. ITE trip generation rates used for this analysis do not account for the limited access nature of a military base, nor do they account for any internal capture<sup>1</sup> of trips. During the preparation of this analysis, it was assumed that for the short-term, the retail area/project area including the Commissary, BX, and satellite pharmacy is built-out and that no additional development will occur. Further, since the re-use of the existing BX and Mini-Mall are not planned in the short-term, the future uses of these facilities were not considered in this analysis.

Table 3-2 demonstrates that upon completion of the Proposed Action at the Preferred Alternative site, the overall impact to on-Base trips is forecasted to decrease. Given the assumptions previously discussed, the proposed collocation of facilities would decrease trips by approximately 1,950 total daily trips on the surrounding roadway network with approximately 52 fewer morning peak hour trips and 177 fewer evening peak hour trips. Even though this analysis is a worst-case scenario, it concludes that only minor, long-term effects would be associated primarily with the redistribution of trips across the Kirtland AFB roadway network. Potential congestion in the project area will be mitigated by the addition of the Texas Street by-pass.

**No Action Alternative**

Implementation of the No Action Alternative would require no demolition or new construction on the Base, nor any roadway realignment; therefore, no change in the existing transportation network would occur.

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<sup>1</sup> An *internal capture rate* is a percentage reduction in traditionally developed trip forecasts to account for trips originating and ending within a multi-use development.

| <b>Table 3-2</b><br><b>Short-Term Trip Generation Summary for</b><br><b>the Proposed Action at the Preferred Alternative Site Location</b> |   |                                    |               |                           |            |            |            |            |              |
|--|---|------------------------------------|---------------|---------------------------|------------|------------|------------|------------|--------------|
| ITE Code   | Land Use<br>(Base Component)  | Quantity<br>(thousand square feet) | Daily Trips   | Trip Generation Estimates |            |            |            |            |              |
|  |   |                                    |               | AM Trips                  |            |            | PM Trips   |            |              |
|  |   |                                    |               | In                        | Out        | Total      | In         | Out        | Total        |
| <b>New Trips</b>   |   |                                    |               |                           |            |            |            |            |              |
| 820  | Shopping Center<br>(Proposed Shopping Center)                                       | 95.4                               | 6,586         | 93                        | 59         | 152        | 291        | 316        | 607          |
| 850  | Supermarket<br>(Commissary)   | 107.7                              | 11,011        | 214                       | 137        | 350        | 574        | 551        | 1,125        |
|  |   | <b>Subtotal</b>                    | <b>17,597</b> | <b>307</b>                | <b>196</b> | <b>502</b> | <b>865</b> | <b>867</b> | <b>1,732</b> |
| <b>Existing Trips</b>  |   |                                    |               |                           |            |            |            |            |              |
| 820  | Shopping Center<br>(Existing Base Exchange)   | 85.7                               | 6,143         | 87                        | 56         | 143        | 271        | 294        | 565          |
| 881  | Pharmacy/Drugstore<br>with Drive-thru Window<br>(Satellite Pharmacy) <sup>(a)</sup> | 1.5                                | 132           | 2                         | 2          | 4          | 6          | 7          | 13           |
| 850  | Supermarket<br>(Commissary)   | 107.7                              | 11,011        | 214                       | 137        | 350        | 574        | 551        | 1,125        |
| 820  | Shopping Center<br>(Existing Mini Mall)   | 18.6                               | 2,276         | 35                        | 22         | 57         | 99         | 107        | 206          |
|  |   | <b>Subtotal</b>                    | <b>19,562</b> | <b>338</b>                | <b>217</b> | <b>554</b> | <b>950</b> | <b>959</b> | <b>1,909</b> |
|  | <b>Total New Trips</b>  |                                    | <b>-1,965</b> | <b>-31</b>                | <b>-21</b> | <b>-52</b> | <b>-85</b> | <b>-92</b> | <b>-177</b>  |

Notes:

ITE Code 820 based on fitted curve logarithmic equation; other ITE Codes based on Average Rate.

ITE Code 820 equation based on gross leasable space; measurement used is the building footprint.

ITE Code 850 equation based on gross floor area; measurement used is the building footprint.

(a) The existing pharmacy is drive-through only, for which no ITE Code exists.

### 3.3 Visual Resources/Aesthetics

#### 3.3.1 Affected Environment

The proposed project site is located between the existing Commissary and BX at the current site of Pennsylvania Street. This area has been previously disturbed and, as a result, has lost some of its original natural appearance. The viewshed from this site is predominated by urban landscapes including buildings, parking, and utilities. The proposed project site is located within the Community and Administration District per the *Kirtland Air Force Base Architectural Compatibility Plan* (Kirtland AFB 2007a).

#### 3.3.2 Environmental Consequences

##### Preferred Alternative

During construction, the proposed project site would have little aesthetic appeal. Ground disturbance, demolition and construction activities, and equipment would be partially visible from the

**3 Affected Environment and Environmental Consequences**

surrounding area including the Pershing Park housing area. Upon the completion of construction, the project site would consist of an urban environment containing the existing Commissary and BX, a new Shopping Center building, existing parking areas, a new Texas Street by-pass, and landscaping. Over the long-term, visual and aesthetic impacts at the proposed project site could be positive with the conversion of the current divided shopping area to a pedestrian-friendly Shopping Center consistent with the design standards specified in the *Kirtland Air Force Base Architectural Compatibility Plan* (Kirtland AFB 2007a).

**No Action Alternative**

Implementation of the No Action Alternative would not require the construction of a new facility and would result in the continued use of the existing facilities and the existing alignment of Pennsylvania Street. The existing BX was constructed in 1977, is an obsolete facility in poor condition, and is not in compliance with existing architectural standards. The No Action Alternative would not result in changes to the visual and aesthetic character of Kirtland AFB and, therefore, would have no effect.

**3.4 Topography, Geology, and Soils**

**3.4.1 Affected Environment**

The Preferred Alternative site is located in the geologic depression known as the Albuquerque Basin within the Mexican Highlands portion of the Basin and Range Physiographic Province. The site elevation is between 5,370 and 5,390 feet above mean sea level. The site is relatively flat and the surface geology consists of quaternary piedmont alluvial deposits and the Santa Fe Group. No mining activities are occurring or are known to have occurred on the proposed project site. Albuquerque and Kirtland AFB lie within Seismic Risk Zone 2 as defined by the International Conference of Building Officials Uniform Building Code. Seismic Risk Zone 2 is a classification of moderate potential for damage to structures from seismic (earthquake) activity (Kirtland AFB 2002). No noteworthy geologic features exist at the Preferred Alternative site.

The proposed project site contains Madurez-Wink Association soils that are characterized as deep, well-drained soils formed on piedmonts and from old unconsolidated alluvium that were modified by wind. The Madurez-Wink series consists of well-drained, fine sandy loam over sandy clay loams, with moderate shrink-swell characteristics, sloughing, and permeability, and may be highly corrosive. Further, Madurez-Wink Association soils have a fair suitability for most activities if used with care.

### **3.4.2 Environmental Consequences**

#### **Preferred Alternative**

Construction of the Proposed Action at the preferred site would require soil material and rocks to be excavated, compacted, and graded as part of site preparation for building and road construction, as well as the removal of existing asphalt and vegetation. Geotechnical test borings taken throughout the Preferred Alternative site location in December 2008 revealed that the site is suitable for the proposed construction (Terracon Consulting Engineers & Scientists 2009). Additional geologic materials would be deposited as part of sub-grade preparation and building foundation construction of the new facility and road. Onsite soils are generally suitable for use as engineered fill; however, some blending of the clays with the sands and moisture conditioning of the soils may be necessary (Terracon Consulting Engineers & Scientists 2009).

Clearing and grading during construction would not impact any geologic features. Short-term adverse construction impacts may result from an increase in soil erosion. Best management practices (BMPs), including but not limited to hay bales, silt fences, and phasing of construction-related activities, would be implemented as part of construction, to minimize soil erosion and sediment transport. Implementation of a stormwater pollution prevention plan (SWPPP) with specific mitigation measures would minimize the potential for erosion and soil runoff.

Due to the proximity of the existing buildings to the proposed building, construction techniques would be used in a way that would not undermine the existing building foundations. This may require shoring of excavations adjacent to existing foundations to protect the structural integrity of the existing buildings (Terracon Consulting Engineers & Scientists 2009).

The building would incorporate seismic design standards defined in International Building Code 2006. Short-term negative impacts including soil erosion and sediment runoff would occur to geology and soil resources at the project site during construction activities; however, these impacts would be minor due to the implementation of appropriate mitigation measures such as hay bales, silt fences, and phasing of construction. No long-term or operational impacts to geology or soils are anticipated.

#### **No Action Alternative**

Implementation of the No Action Alternative would require no new construction or land disturbance activities on the Base; therefore, no topographic resources, geologic features, or soils would be impacted. Furthermore, the Base would continue to adhere to federal and state laws and

regulations, established Base policies and guidelines such as erosion control BMPs, and spill control measures at the existing AAFES facility.

## **3.5 Air Quality**

### **3.5.1 Affected Environment**

The Clean Air Act of 1970, 42 U.S.C. 7401 *et seq.*, amended in 1977 and 1990, is the primary federal statute governing air pollution. The Clean Air Act designates six pollutants as criteria pollutants, for which National Ambient Air Quality Standards (NAAQS) have been promulgated to protect public health and welfare.

The six criteria pollutants are particulate matter (PM<sub>10</sub> [10 microns or less in diameter] and PM<sub>2.5</sub> [less than 2.5 microns in diameter]), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), lead (Pb), and ozone (O<sub>3</sub>). Volatile organic compounds (VOCs) are not considered criteria pollutants, but emissions of VOCs are linked to ozone concentrations. In addition, federal law requires state or local air quality control agencies to establish a State Implementation Plan that prescribes measures to achieve or maintain attainment of these standards. Areas that do not meet NAAQS are designated as “non-attainment” for that criteria pollutant. The New Mexico Environment Department manages air quality for the state of New Mexico outside of Bernalillo County. The City of Albuquerque Environmental Health Department, Air Quality Division, governs air quality on Kirtland AFB. The Albuquerque/Bernalillo County Air Quality Control Board is the federally delegated air quality authority for Albuquerque and Bernalillo County. The Board administers and enforces the Clean Air Act and the New Mexico Air Quality Control Act.

Bernalillo County, where Kirtland AFB is located, is in attainment for most of the Albuquerque-Bernalillo County Ambient Air Quality Standards; however, it is designated as a maintenance area for carbon monoxide. Kirtland AFB is currently subject to federal conformity rule requirements because of the maintenance classification. However, Bernalillo County (including Kirtland AFB) received approval from the United States Environmental Protection Agency (USEPA) for the county’s Limited Maintenance Plan for CO, which eliminates the conformity requirements in Title 20, Chapter 11 of the New Mexico Administrative Code (NMAC General Conformity). This plan took effect in June 2006.

The Clean Air Act, Section 169A, established the Prevention of Significant Deterioration (PSD) regulations to protect the air quality in regions that already meet the NAAQS. The primary purpose of the PSD regulations is to ensure that impacts from new or modified sources in

combination with other sources do not exceed the maximum allowable incremental increases for those pollutants in attainment. The PSD analysis is only required for point sources that emit more than 250 tons per year (tpy).

## Greenhouse Gas Emissions

Greenhouse gas emissions consist primarily of CO, methane (CH<sub>4</sub>), and nitrogen oxides (NO<sub>x</sub>). Carbon dioxide (CO<sub>2</sub>) enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and also as a result of other chemical reactions (e.g., manufacture of cement). CH<sub>4</sub> is emitted during the production and transport of coal, natural gas, and oil. Nitrous oxide (N<sub>2</sub>O) is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste (USEPA 2008).

To assist with the determination of greenhouse gases emitted, the Intergovernmental Panel on Climate Change (IPCC) has developed Global Warming Potentials (GWPs) that analyze gases' abilities to trap heat in the atmosphere. GWPs are based on the heat-absorbing ability of each gas, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years) relative to that of CO<sub>2</sub>. The GWPs provide a factor for converting emissions of various gases into a common measure denominated in carbon or carbon dioxide equivalent (CO<sub>2</sub>EQ). The GWP factors are specified in Table 3-3.

| <b>Table 3-3</b>                        |                              |
|---|------------------------------|
| <b>Global Warming Potential Factors</b> |                              |
| <b>Gas</b>                              | <b>2001 IPCC GWP Factors</b> |
| Carbon Dioxide (CO <sub>2</sub> )       | 1                            |
| Methane (CH <sub>4</sub> )              | 21                           |
| Nitrous Oxide (N <sub>2</sub> O)        | 310                          |

Source: The generally accepted authority on Global Warming Potential (GWPs) is the Intergovernmental Panel on Climate Change (IPCC). In 2001, the IPCC updated its estimates of GWPs for key greenhouse gases and this table is reflective of that update (The Climate Trust 2007).

### 3.5.2 Environmental Consequences

#### Preferred Alternative

##### Construction

Construction of the Proposed Action at the preferred site would result in minor, short-term (Note: Construction would last 18 months), localized, adverse impacts on air quality. These impacts would result from the generation of fugitive dust (i.e., equipment traveling over exposed surfaces), equipment emissions, and the slight increase in construction-related traffic that would be expected

**3 Affected Environment and Environmental Consequences**

during the construction of the proposed facility. Generation of fugitive dust would be minimized through the use of appropriate dust control measures (i.e., wetting the surfaces and re-vegetation of disturbed areas as soon as possible). The City of Albuquerque Environmental Health Department, Air Quality Division, requires that a Fugitive Dust Control Construction Permit be obtained 10 business days prior to construction for surface disturbance or demolition activity.

Construction of the Proposed Action would result in an increase in tailpipe emissions associated with the use of heavy equipment during construction activities. These short-term impacts would be primarily in the form of increased exhaust pollutants that could be minimized through good vehicle maintenance. The total emissions expected from the construction of the Proposed Action are provided below. No permanent emissions would be expected from the construction of the new AAFES facility.

As indicated previously, a conformity analysis is not required for this project. Further, greenhouse emissions anticipated from this project would be approximately 112 tons. This number was calculated by multiplying total CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O by their corresponding GWP factors as provided in Table 3-3. The total construction emissions associated with the Proposed Action are provided in Table 3-4.

| <b>Table 3-4</b>  |   |   |   |                             |  |
|---|---|---|---|-----------------------------|--|
| <b>Total Air Emission Estimates Associated with the Proposed Action</b> |   |   |   |                             |  |
| <b>Emission Source</b>  | <b>Emissions (total tons during construction activity*)</b> |   |   |                             |  |
|   | <b>Volatile Organic Compounds (VOCs)</b>                    | <b>Nitrogen Oxides (NO<sub>x</sub>)</b> | <b>Particulate Matter of Less than 10 Microns (PM<sub>10</sub>)</b> | <b>Carbon Monoxide (CO)</b> | <b>Carbon Dioxide (CO<sub>2</sub>)</b> |
| Construction Equipment  | 1.59  | 14.93                                   | 0.79  | 9.89                        | -                                      |
| VOCs from Paving and Painting   | 1.77  |   |   |                             |  |
| PM from Grading and Demolition  |   |   | 5.42  |                             |  |
| Personally Owned Vehicles   | 0.004   | 0.004                                   | <0.001  | 0.036                       |  |
| Greenhouse Gas Emissions  | -   | -                                       | -   | -                           | 112                                    |
| <b>TOTAL</b>  | <b>3.36</b>   | <b>14.93</b>                            | <b>6.21</b>   | <b>9.93</b>                 | <b>112</b>                             |

Note: \* Construction is estimated to last approximately 18 months.

**Operation**

No impacts to air quality would be expected from the operation of the proposed facility. The Proposed Action would not create new vehicle trips over the Base roadway network, merely a re-distribution of existing trips. Additionally, no fuel-dispensing facilities would be associated with the Proposed Action that could result in increased emissions.

NMAC 20.11.41 requires the preparation and submission of an Authority to Construct Permit for any source that emits 10 pounds per hour or 25 tpy of any regulated air pollutant. Since none of the regulated air pollutants exceed the limit, an Authority to Construct Permit would not be required. Also, a Fugitive Dust Control Construction Permit needs to be obtained 10 business days prior to construction. A PSD analysis is not required since the emissions from the project would be well below the PSD threshold of 250 tpy.

## **No Action Alternative**

Implementation of the No Action Alternative would require no new construction or land disturbance activities on the Base; therefore, no air quality impacts associated with construction activities would occur.

## **3.6 Utilities and Infrastructure**

### **3.6.1 Affected Environment**

Kirtland AFB is the owner and operator of the on-Base electric, potable water, natural gas, and sanitary sewer and stormwater collection and/or distribution utility lines.

#### **Electricity**

Kirtland Civil Engineer Utilities provides electrical service to the Base. The exact utility demand of the proposed Shopping Center would not be known until the design of the facility is completed, however, approximately 8 megawatts of power is available from the feeder for this facility and could accommodate the power needs of the Preferred Alternative (Hale 2010).

#### **Sanitary Sewer and Wastewater**

Though Kirtland owns and operates the sanitary sewer collection system, there is no sanitary sewer treatment facility on Kirtland AFB. Treatment of sewer effluent is provided by the City of Albuquerque's treatment facilities, which have sufficient treatment capacity to handle the effluent from the Preferred Alternative. Sewer lines in the immediate vicinity of the proposed project have sufficient capacity to accommodate the proposed project as they generally flow at less than 20% capacity. Stormwater infrastructure is also owned and maintained by Kirtland AFB. Stormwater is not treated; it flows into existing arroyos (deep gullies cut by intermittent streams) that eventually discharge to the Rio Grande River (Hale 2010).



## **Potable Water**

The potable water utility is owned and operated by Kirtland Civil Engineer Utilities. Potable water is supplied from six Installation water wells and two separate but interconnected distribution systems that draw from the Middle Rio Grande Basin of the Santa Fe Group aquifer system. Water is purchased from the Albuquerque Bernalillo County Water Utility Authority, primarily for meeting peak hour demand when Base wells are out of service (Hale 2010). In recent years, water levels in the aquifer have declined region-wide due to water being removed faster than it is being recharged or replaced. Conservation efforts by the City of Albuquerque have been successful in reducing consumption by 23% between 1995 and 2000 (U.S. Geological Survey 2002), with further reductions planned. Further, the Albuquerque area will be supplemented with surface waters diverted from the San Juan and Chama Rivers to the Rio Grande (Kirtland AFB 2007b).

On-Base potable water wells can produce over 10 million gallons per day (mgd) and Kirtland AFB can purchase an additional 2.5 mgd from the City of Albuquerque. As of February 2010, Kirtland AFB uses approximately 2.5 mgd, leaving capacity to serve the proposed project (Hale 2010).

## **Natural Gas**

Natural gas would be required to operate the proposed Shopping Center. Kirtland AFB Utilities purchases natural gas from a wholesale supplier and distributes it by pipeline owned by the New Mexico Gas Company. The wholesaler supplies gas to several metering stations at the Base boundaries, and the Kirtland AFB Utilities branch distributes gas from the metering stations. Kirtland AFB Utilities has approximately 2.7 million KCF (kilo [thousand] cubic feet) available, while average consumption is around 1 million KCF, leaving sufficient capacity available for the proposed project (Hale 2010).

## **Solid Waste**

Solid waste from the Base is collected and disposed of off-Base by contractors. Construction debris and demolition waste generated on Kirtland AFB is disposed of at the on-Base landfill, which has sufficient capacity to handle construction and demolition waste generated from the proposed project (Hale 2010).

## **Communications**

Communications infrastructure is sufficient in proximity and capacity to serve the proposed Shopping Center. Kirtland AFB operates its own telephone switching system. Fiber optic cables are

available in proximity to the Preferred Alternative to accommodate any anticipated demand (Kirtland AFB 2002).

### **3.6.2 Environmental Consequences**

#### **Preferred Alternative**

##### **Utility Connections**

Implementation of the Proposed Action at the Preferred Alternative site location would require the relocation of existing underground utilities. These utilities include an 8-inch water line; 6-inch and 8-inch natural gas lines; 10-inch to 12-inch sanitary sewer mains running north-south along Pennsylvania Avenue; and 12-inch, 18-inch, and 36-inch storm drains running mainly east-west (Lee 2009). In addition, construction would likely require the removal of an abandoned water line and an abandoned gas line running the extent of the new Shopping Center footprint, as well as multiple operational underground communication manholes, ducts, and direct buried lines.

The 6-inch natural gas line is owned and operated by Kirtland AFB and distributes natural gas purchased by Kirtland AFB. This line is a local/distribution feeder that services the existing Commissary and the Pershing Park housing area. A feeder line that serves the Commissary extends from the 6-inch main. The 8-inch, high-pressure main is owned and operated by New Mexico Gas Company under an easement granted by the Secretary of the Air Force. This is a bypass line that runs through the Base but does not serve any Base facilities. Additionally, a natural gas regulator station is located at the corner of Pennsylvania and Gibson; this regulator would not have to be relocated (Lee 2009).

Prior to the relocation of any utilities, all necessary agreements would be executed with each utility company. Further, construction and relocation would be timed in such a way as to minimize disruption of natural gas service to existing customers.

##### **Demand**

New supply lines for gas, water, and sewer, as well as new electrical lines tied into the existing distribution system, would be required for the Preferred Alternative (Hale 2010). As described in Section 3.6.1, each utility has sufficient capacity to accommodate the Proposed Action. Additionally, given that the Proposed Action contains restaurants, grease traps will be installed as a pretreatment measure to ensure compliance with the Base's Albuquerque Bernalillo County Water Utility Authority wastewater discharge permit.

## **No Action Alternative**

Implementation of the No Action Alternative would require no new construction or land disturbance on the Base, and would require no relocation of utilities; therefore, no change in existing utility demands or infrastructure locations would occur.

## **3.7 Biological Resources**

### **3.7.1 Affected Environment**

The native vegetation on Kirtland AFB is grassland vegetation. The Preferred Alternative site is previously disturbed within a developed portion of Kirtland AFB. The primary vegetation consists of landscaped trees, shrubs, and grasses along Pennsylvania Street, and some opportunistic grasses and weeds in the area of the proposed Texas Street by-pass. Common wildlife occurring at the site include species adapted to human disturbance, such as starlings, robins, grackles, sparrows, rabbits, and prairie dogs.

Eight federally or state-listed threatened or endangered species could potentially occur at Kirtland AFB, plus seven federal species of concern and one state sensitive plant species. No federally listed species are resident on the Base; however, transients may occur (Finley 2009). The gray vireo (*Vireo vicinior*), a state-listed threatened species, has been found in juniper woodland at the easternmost portion of the Base, approximately 4.4 miles from the Preferred Alternative site. Further, there is no potential habitat for the gray vireo on or near the preferred site. The western burrowing owl (*Athene cunicularia*), a species of concern to the State of New Mexico, Bureau of Land Management, United States Forest Service, as well as protected under the Migratory Bird Treaty Act (MBTA), is associated with the prairie dog colonies on Base, as they use abandoned prairie dog towns for nesting. Prairie dogs are located on the Preferred Alternative site, particularly in the vicinity of the proposed Texas Street by-pass (Finley 2009). It is also important to note that, in general, owls occur on Base between March and October before migrating south, although a few birds may occur on Base during mild winters.

### **3.7.2 Environmental Consequences**

#### **Preferred Alternative**

Construction would take place within a developed area of the Base on previously disturbed lands with minimal wildlife and vegetation. As such, contact with wildlife or related habitat is unlikely since no federal or State of New Mexico threatened or endangered species have ever been reported at or near the project area. The prairie dogs that are located on the preferred site in the area

of the proposed Texas Street by-pass would be handled in accordance with the management practices identified in the Kirtland AFB Prairie Dog Management Plan (LopezGarcia Group Inc. 2003).

Each burrow would be surveyed prior to construction for the presence of the western burrowing owl, a federal species of concern under the MBTA. Prior to the removal of any trees, surveys would be conducted for the presence of species under the MBTA; however, if the trees are removed outside the breeding season (March through August), no surveys would need to be conducted (Finley 2009). If required, Kirtland AFB would implement standard mitigation procedures in conformance with the MBTA, should any relocation be necessary during the construction of the Proposed Action. Thus, any impacts to burrowing owls or other wildlife or vegetation would be minor during construction and operation activities.

### **No Action Alternative**

Implementation of the No Action Alternative would require no new construction or land disturbance on the Base and the property and road alignments would remain in their current configuration. Therefore, no impacts to vegetation, wildlife, or threatened and endangered species would occur.

## **3.8 Cultural Resources**

### **3.8.1 Affected Environment**

Section 106 of the National Historic Preservation Act and implementing regulations (36 CFR 800) outline the procedures to be followed during the documentation, evaluation, and mitigation of impacts for cultural resources. The Section 106 process applies to any federal undertaking that has the potential to affect cultural resources. Projects that require federal funding or are subject to federal regulations are also subject to Section 106.

### **3.8.2 Environmental Consequences**

#### **Preferred Alternative**

Although no known cultural or archaeological resources are located on the proposed project site, the State Historic Preservation Office at the New Mexico Historic Preservation Division and 26 tribal entities were contacted (see correspondence in Appendix B).

Further, if cultural resources are inadvertently discovered during construction, the contractor would cease all work and comply with Kirtland AFB inadvertent discovery procedures. All applicable federal, state, and local cultural resources laws and regulations will be followed.

## **No Action Alternative**

Implementation of the No Action Alternative would require no new construction or land disturbance on the Base; therefore, there would be no effect on cultural resources.

## **3.9 Water Resources**

### **3.9.1 Affected Environment**

Kirtland AFB is located within the Rio Grande basin. The Rio Grande, the only perennial stream in the vicinity of Kirtland AFB, is located approximately 5 miles west of the Base (Figure 1-1). Surface water on Kirtland AFB flows into small gullies during rainfall. No permanent streams or natural impoundments occur on the Base. The two main drainage features on the Base are Tijeras Arroyo, an ephemeral stream that is located approximately 2 miles south of the proposed project site, and the smaller Arroyo del Coyote, which joins Tijeras Arroyo. Both arroyos flow intermittently during heavy thunderstorms, but most of the water percolates into alluvial deposits or is lost to the atmosphere via evapotranspiration (Kirtland AFB 2002). A 100-year floodplain encompasses Tijeras Arroyo and Arroyo del Coyote, following their paths. These are the only two arroyos with a floodplain on the Base (Kirtland AFB 2007b). Stormwater from the north-central part of the Installation, including housing areas, discharges via overland runoff and small culverts toward Gibson Avenue along the Kirtland AFB-City of Albuquerque boundary. Also, four detention ponds are within the cantonment area, including the North Water Detention Area immediately west of the Commissary (Kirtland AFB 2002). No surface water features (e.g., rivers or streams), floodplains, wetlands, or other sensitive water features are present at the Preferred Alternative site.

Kirtland AFB is located within the limits of the Middle Rio Grande Underground Water Basin, which is part of the Santa Fe Group aquifer system. The basin is regulated by the state as a sole source of potable water. Groundwater is the source of potable water at Kirtland AFB and is supplied by on-Base wells as discussed in Section 3.6. This aquifer is most likely recharged east of the Installation in the Manzanita Mountains where the sediment soils materials favor rapid infiltration. The average depth to groundwater beneath Kirtland AFB ranges from 450 to 550 feet below ground surface (Kirtland AFB 2007b).

Kirtland AFB holds a National Pollutant Discharge Elimination System (NPDES) General Stormwater Permit for industrial activities issued by the USEPA. Kirtland AFB also holds an MS4 general permit issued by the USEPA that includes the Commissary and the BX.

## **3.9.2 Environmental Consequences**

### **Preferred Alternative**

#### **Construction**

Implementation of the Proposed Action on the preferred site would have a minor impact on water resources due to an increase in stormwater runoff from the increase in impervious surface area associated with the new road behind the proposed new Shopping Center. Specifically, the proposed construction of the new Texas Street by-pass would result in an increase of approximately 12,770 square feet (0.29 acres) of additional impervious surface area.

NPDES regulations require that if a proposed construction site is larger than 1 acre, a Notice of Intent (NOI; Appendix C) must be submitted to the USEPA to comply with the NPDES Construction General Permit. Further, AAFES will develop and implement an SWPPP prior to construction and will submit the draft SWPPP to Kirtland AFB Environmental Management for review prior to submitting an NOI to the USEPA. A copy of this plan will be located and maintained at the proposed construction site. As a part of the SWPPP, the contractor will be required to implement erosion-control measures, including but not limited to hay bales, silt fencing, sodding, and phasing of construction, to prevent the uncontrolled discharge of sediments and pollutants during construction.

Under Section 438 of the Energy Independence and Security Act of 2007, federal facilities over 5,000 square feet must “maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow.” The Proposed Action shall incorporate low impact development techniques in compliance with the USEPA’s *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act*.

#### **Operations**

The proposed new building footprint would slightly increase impervious surface area and the new Texas Street by-pass would add approximately 12,770 square feet (0.29 acres) of impervious surface area. Long-term impacts would include an increase in stormwater runoff associated with this increase in impervious surface area. In addition, non-point source pollution associated with the facility and/or vehicles at the facility and on the Texas Street by-pass could potentially increase. Implementation of BMPs and design measures, including the placement of culverts, swales, storm drains and inlets, and retention facilities, would minimize potential short-term and long-term adverse impacts to surface water.

## **No Action Alternative**

Implementation of the No Action Alternative would require no new construction on Kirtland AFB. Because no construction activities would take place, no impact to surface waters, groundwater, wetlands, or floodplains would occur. However, the operations and maintenance of the existing AAFES facilities would continue to be performed in accordance with the Kirtland AFB SWPPP and other local, state, and federal laws and regulations.

## **3.10 Hazardous Materials and Waste**

### **3.10.1 Affected Environment**

The United States Department of Transportation regulates the safe packaging and transporting of hazardous materials, as specified in 49 CFR. The Occupational Safety and Health Administration regulates the safe use of hazardous materials in the workplace in 29 CFR. The Resource Conservation and Recovery Act governs the disposal of solid and hazardous waste (40 CFR 239-299).

The *Kirtland AFB Hazardous Waste Management Plan (HWMP)* establishes policies, procedures, and responsibilities to ensure compliance with environmental laws and regulations (Kirtland AFB 2004). The HWMP provides a single-source document for personnel involved with hazardous materials and waste to ensure proper identification, packaging, storing, transporting, treatment, and/or reporting of hazardous materials and waste on Kirtland AFB. Lead-based paint is disposed of by contractors.

### **3.10.2 Environmental Consequences**

#### **Preferred Alternative**

##### **Construction**

Demolition and construction of the Proposed Action at the preferred site would necessitate the use of heavy machinery that requires maintenance and fuel. Although maintenance would most likely be performed off-site and within an authorized service shop, the use of construction machinery could potentially introduce small quantities of solvents, cleaning agents, greases, oils, hydraulic fluids, and fuel (e.g., gasoline and diesel). Paints and adhesives also would be used on the site during project construction. Hazardous materials and wastes would be stored and disposed of in accordance with all local, state, and federal laws and regulations, and the Kirtland AFB HWMP. There are no known occurrences of asbestos or lead-based paint within the satellite pharmacy, the only existing

facility being altered; therefore, no increase in the generation of asbestos or lead-based paint wastes is anticipated.

### **Operation**

No large quantities of hazardous materials are anticipated to be used during the operation phase of the Proposed Action; most hazardous materials used would be of small quantity and considered household hazardous materials (e.g., cleaning solutions, paints). Laundry/drycleaning services at the proposed Shopping Center would be retail in nature, providing drop-off and pick-up of laundry, while actual drycleaning activities would be conducted off site, resulting in no additional hazardous materials and waste at the Preferred Alternative site. Therefore, impacts from hazardous materials and waste from construction and operation activities would be minor since storage and disposal of all hazardous materials and wastes would be in compliance with current laws and regulations.

### **No Action Alternative**

Implementation of the No Action Alternative would not require the construction of a new facility and would result in the continued use of the existing facilities. No additional hazardous materials would be stored and no hazardous wastes would be generated. Spill prevention, control, and countermeasures (SPCC) requirements at Kirtland AFB include implementation of measures and practices that would prevent and/or minimize spill of/release from the storage and handling of hazardous materials. *Kirtland AFB Spill Prevention, Control and Countermeasures Plan* requirements would continue to be enforced at the existing AAFES facilities. Therefore, no change to existing conditions would be anticipated under the No Action Alternative.

## **3.11 Noise**

### **3.11.1 Affected Environment**

‘Noise’ is broadly characterized as sound that is undesirable due to the potential for hearing damage, communications interference, sleep disruption, or general annoyance. Aircraft operations are the primary sources of noise associated with Kirtland AFB. Additional noise sources on the Installation include vehicular traffic and construction activities. Levels of noise are measured in decibels (dB). The decibel is a relative measure of the sound pressure with respect to a standardized reference quantity. Noise measurements are often adjusted, or weighted, as a function of frequency to account for human perception and sensitivities. The most common weighting network used is the A-weighted network. This weight scale was developed to allow sound level meters to simulate the



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frequency sensitivity of the human hearing mechanism. Decibels on the A-weighted scale are termed dBA. The letter “A” indicates that the sound has been filtered to reduce the strength of very low and very high frequency sounds, much as the human ear does. Because the scale is logarithmic, a relative increase of 10 decibels represents a sound pressure that is 10 times higher. However, humans do not perceive a 10-dBA increase as 10 times louder. Instead, they perceive it as twice as loud.

Table 3-5 lists some noise levels for typical daily activities and corresponding human responses. The following is typical of human response to relative changes in noise level:

- A 3-dBA change is the threshold of change detectable by the human ear;
- A 5-dBA change is readily noticeable; and
- A 10-dBA change is perceived as a doubling or halving of noise level.

| <b>Table 3-5<br/>Noise Levels of Common Sources and Human Responses</b>                              |                        |   |
|--|------------------------|---|
| <b>Noise Source</b>  | <b>dBA Noise Level</b> | <b>Response</b>   |
| Carrier Jet Operation  | 140                    | Harmfully Loud  |
|  | 130                    | Pain Threshold  |
| Jet Takeoff (200 feet from the source)<br>Discotheque  | 120                    |   |
| Un-muffled Motorcycle<br>Auto Horn (3 feet from the source)<br>Rock n' Roll Band<br>Riveting Machine | 110                    | Maximum Vocal Effort<br><br>Physical Discomfort             |
| Loud Power Mower<br>Jet Takeoff (2000 feet from the source)<br>Garbage Truck                         | 100                    | Very Annoying<br>Hearing Damage<br>(Steady 8-Hour Exposure) |
| Heavy Truck (50 feet from the source)<br>Pneumatic Drill (50 feet from the source)                   | 90                     |   |
| Alarm Clock<br>Freight Train (50 feet from the source)<br>Vacuum Cleaner (10 feet from the source)   | 80                     | Annoying  |
| Freeway traffic (50 feet from the source)  | 70                     | Telephone Use Difficult                                     |
| Dishwashers<br>Air Conditioning Unit (20 feet from the source)                                       | 60                     | Intrusive   |
| Light Auto Traffic (100 feet from the source)  | 50                     | Quiet   |
| Living Room/Bedroom  | 40                     |   |
| Library<br>Soft Whisper (15 feet from the source)  | 30                     | Very Quiet  |
| Broadcasting Studio  | 20                     |   |
|  | 10                     | Just Audible  |
|  | 0                      | Threshold of Hearing  |

Source: Branch and Beland 1970.

A-weighted decibels identify a noise level at a single point in time, however ambient noise levels vary constantly. Therefore, the day-night sound level (Ldn or DNL) is used to describe noise levels over an extended period of time. The DNL is a noise rating developed by the USEPA for

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specification of community noise from all sources. The DNL includes a weighting penalty of 10 dBA added to sound levels occurring between 10:00 p.m. and 7:00 a.m.

The three principal types of noise sources that affect the environment are mobile sources, stationary sources, and construction sources. Mobile sources are those noise sources that move in relation to a noise receptor—principally automobiles, buses, trucks, aircraft, and trains. Stationary sources of noise, as the name implies, do not move in relation to a noise receptor. Typical stationary noise sources of concern include machinery or mechanical equipment associated with industrial and manufacturing operations or building heating, ventilating, and air-conditioning systems. Construction noise sources comprise both mobile (e.g., trucks, bulldozers, etc.) and stationary (e.g., compressors, pile drivers, power tools, etc.) sources. Construction noise is always considered to be temporary regardless of the construction duration.

Principal sources of noise at Kirtland AFB include the taking off and landing of military aircraft at Kirtland, and the taking off and landing of commercial aircraft at the Albuquerque International Sunport. The project area is located outside the greater than 65 dBA DNL noise zones associated with the airfield (Kirtland AFB 2002). Aircraft noise abatement strategies, including selective runway use and timing restrictions, are used both at Kirtland AFB and at the Sunport to limit noise.

### **3.11.2 Environmental Consequences**

#### **Preferred Alternative**

##### **Construction**

A construction noise model was used to determine projected noise levels at four proximate receptor locations during a typical hour for the mobilization/demolition and construction phases. The algorithm in the model considered construction equipment noise specification data, usage factors, the relative distances of the noise-sensitive receptor to the source of noise, physical barriers, and the proposed project construction schedule.

The logarithmic equation used to compute projected noise levels is provided in Appendix D. Additionally, the equation used to calculate the sound level resulting from the operation of all the equipment simultaneously, as used in the following discussions, is provided in Appendix D.

Equivalent continuous noise levels ( $L_{eq}$ ) and usage factor data for construction equipment were obtained from the Federal Highway Administration's (2006) *Highway Construction Noise Handbook*. Usage factors were used to account for the fact that construction equipment use is

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intermittent throughout the course of a normal workday. Phased breakdowns of anticipated equipment use were derived from the project construction schedule. Distances from construction equipment to the designated noise receptor locations were based on locating the equipment at the nearest point on the site from the sensitive receptor. The equipment type, quantity, emission levels, utilization factors, receptor distances, and projected noise levels for the construction phases are listed in Tables 3-6 and 3-7 (also see equation in Appendix D).

| <b>Table 3-6<br/>Noise Levels for Typical Construction Equipment</b> |  |                            |  |                                  |
|--|--|----------------------------|--|----------------------------------|
| <b>Equipment Type</b>  | <b>Emission Level <sup>(a)</sup><br/>(dBA)</b> | <b>Distance<br/>(feet)</b> | <b>Utilization Factor <sup>(a)</sup><br/>(dBA)</b> | <b>SPL<br/>(dBA)<br/>50 feet</b> |
| Backhoe Loader   | 80   | 50                         | 0.4  | 76                               |
| Haul Truck   | 84   | 50                         | 0.4  | 80                               |
| Bulldozer  | 85   | 50                         | 0.4  | 81                               |
| Water Truck  | 84   | 50                         | 0.4  | 80                               |
| Grader   | 85   | 50                         | 0.4  | 81                               |
| Cement Truck   | 85   | 50                         | 0.4  | 81                               |
| Generator  | 82   | 50                         | 0.5  | 79                               |
| Air Compressor   | 80   | 50                         | 0.4  | 76                               |
| Paving Machine Roller  | 85   | 50                         | 0.2  | 78                               |
| <b>Maximum Total SPL</b>   |  |                            |  | <b>89</b>                        |

Note: (a) Source: Federal Highway Administration 2006.

Key:

dBA = A-weighted decibels.

SPL = sound pressure level.

| <b>Table 3-7<br/>Maximum Estimated Construction Noise Levels at Receptor Exterior</b> |                                |                            |                                 |
|---|--------------------------------|----------------------------|---------------------------------|
| <b>Receptor</b>   | <b>SPL @<br/>50 feet (dBA)</b> | <b>Distance<br/>(feet)</b> | <b>SPL @<br/>Receptor (dBA)</b> |
| Gibson Child Center (Building 20160)  | 89                             | 128                        | 81                              |
| Wherry Elementary School (Building 25000)   | 89                             | 846                        | 64                              |
| Park South of Gibson (baseball and track)   | 89                             | 460                        | 70                              |
| McDonald's (Building 20241)   | 89                             | 520                        | 69                              |
| Recreation Building (Building 20242)  | 89                             | 867                        | 64                              |
| Commissary (Building 20180)   | 89                             | 50                         | 89                              |
| Base Exchange (Building 20170)  | 89                             | 36                         | 92                              |
| Vet Clinic (Building 20168)   | 89                             | 62                         | 87                              |
| Housing 1 <sup>(a)</sup>  | 89                             | 50                         | 89                              |
| Housing 2   | 89                             | 108                        | 82                              |
| Housing 3   | 89                             | 100                        | 83                              |
| Housing 4   | 89                             | 160                        | 79                              |
| Housing 5   | 89                             | 120                        | 81                              |
| Graphics (20140)  | 89                             | 711                        | 66                              |
| Gas Station (20147)   | 89                             | 940                        | 64                              |
| Gibson Gate Visitor's Center (20186)  | 89                             | 528                        | 69                              |
| Park within Neighborhood to North   | 89                             | 600                        | 67                              |

**Table 3-7**  
**Maximum Estimated Construction Noise Levels at Receptor Exterior**

Notes:

Distance is measured from nearest edge of the construction activity to nearest edge of the building.

(a) Houses located immediately north of the by-pass. These are the five houses that would be closest to any construction activities.

Key:

dBA = A-weighted decibels.

SPL = sound pressure level.

Once the sound pressure level (SPL) for the individual equipment unit was calculated based on the utilization factor, the contribution of all major noise-producing equipment on-site was combined to provide a maximum total SPL of 89 dBA as presented in Table 3-6. Using the maximum total SPL from Table 3-6, the SPL was calculated for each of the nearest noise receptors identified and included in Table 3-7 (also see equation in Appendix D).

Based on Table 3-7, with all of the equipment operating simultaneously, the worst-case  $L_{eq}$  noise level generated could result in noise complaints. However, the projected levels in Table 3-7 were developed conservatively with no credit taken for noise reduction by ground or atmospheric attenuation or shielding by existing building structures. In addition, noise generated by the construction of the project would be temporary and would be scheduled to take place over 18 months during daytime hours only when people are generally awake and are less likely to be affected by noise.

Noise impacts from construction would be minor and short-term in nature. These impacts may be mitigated through a number of measures including:

- Designating routes that do not carry construction-related truck traffic past sensitive noise receptors;
- Enclosing noisiest stationary equipment with portable noise barriers;
- Limiting heavy equipment activity near sensitive receptors to the shortest possible period required to complete the work activity;
- Ensuring that proper mufflers and other noise reduction equipment are in good working condition;
- Establishing and publicizing a telephone hotline for members of the public to call should they have a noise complaint;
- Laying out the construction sites to minimize the need for backup alarms, using broadband noise backup alarms, and using flagmen to keep the area behind the maneuvering vehicles clear; and
- Where practical, locating stationary equipment such as compressors, generators, and welding machines away from sensitive receptors or behind barriers.

## **Operation**

Noise from the operation of the Proposed Action at the Preferred Alternative site location would primarily be due to additional vehicular traffic, including delivery trucks and patron traffic, generated by the new facility. As discussed in Section 3.2, the consolidation of services associated with the Proposed Action would redistribute some trips to the project area, but would not create an increase in overall trips on Base. The potential for increased patron traffic to the project area would only occur during regular business hours and would be greatest in the evening peak hour and during the mid-day lunch hour. The Preferred Alternative site location is located in an urbanized area of the Base that already accommodates traffic, therefore, the redistribution of patron trips to the project area would not create a significant increase in noise impacts.

The addition of new services to be offered at the new Shopping Center over those currently being offered at the existing BX would likely result in a minimal increase in delivery truck traffic as trucks are also redistributed to the project area. Under current conditions, delivery truck traffic accesses the existing Commissary and BX via Pennsylvania Street. Under the Preferred Alternative, truck traffic would access the site via the proposed Texas Street by-pass. The Texas Street by-pass would be near some existing Base housing (Table 3-7). The potential increase in delivery traffic to the Preferred Alternative site, as well as the proximity of the Texas Street by-pass to Base housing, would result in an increase in delivery truck noise with the potential to affect housing. These impacts would be moderate in nature, but through various mitigation measures including scheduling deliveries during daytime hours and installing a noise barrier such as a berm or wall between the by-pass and Base housing, these temporary impacts would be minimized. There would be a long-term, minor adverse effect from the Preferred Alternative, but this effect would not result in incompatible noise activities to sensitive noise receptors located adjacent to the proposed project site.

## **No Action Alternative**

Under the No-Action Alternative, existing noise levels would remain the same and no impacts would occur to sensitive noise receptors located adjacent to the proposed site.

# **3.12 Socioeconomics**

## **3.12.1 Affected Environment**

Socioeconomics is the multi-disciplinary evaluation of economic activity and social well-being. The region of influence for this socioeconomic analysis is Albuquerque and Bernalillo County. Specifically, the analysis included a comparison of city, county, and national population estimates and projected increases, as well as an analysis of household incomes. Further, according to the

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*Kirtland AFB Economic Impact Statement for Fiscal Year 2008* (Kirtland 2008a), Kirtland AFB provides employment to approximately 20,721 military and contractor personnel. Kirtland AFB's total impact to the local community is valued at approximately \$5.6 billion.

### **3.12.2 Environmental Consequences**

#### **Preferred Alternative**

The number of personnel assigned to Kirtland AFB would not be expected to increase as a result of the Proposed Action and would not require the provision of additional services (e.g., schools). During construction activities, temporary construction jobs would be created that would be distributed throughout the Albuquerque area. These jobs would benefit the Albuquerque economy and would result in both direct and indirect revenues to the local community. In general, the long-term operation of the proposed project would likely create some job opportunities at the proposed facility, thereby resulting in a beneficial impact to the overall employment and/or income potential of residents in the Albuquerque metropolitan area.

#### **No Action Alternative**

Implementation of the No Action Alternative would not require the construction of a new facility and would result in the continued use of the existing facilities. Therefore, there would be no job creation or changes to existing socioeconomic conditions.

## **3.13 Environmental Justice**

### **3.13.1 Affected Environment**

In compliance with EO 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," agencies must ensure that federal actions do not disproportionately impose adverse effects on minority and/or low-income populations. U.S. Census 2000 data were used to identify poverty levels within census tracts adjacent to Kirtland AFB. Analysis of these data concluded that the nearest census tract (9.01) to the proposed project area is located approximately 0.3 mile from the site and reported a poverty level of 39.6%. The highest reported level of poverty within Bernalillo County (Census Tract 6.03) is 42.1%, located approximately 1.0 mile from the proposed project site (U.S. Census Bureau 2000).

As indicated in Table 3-8, the city and county populations are comprised of larger percentages of Hispanic or Latino, American Indian, and Alaska Native persons in comparison to national levels. Additionally, while the city and county poverty rates, 15.0% and 14.9%, respectively,

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are lower than the state rate (17.1%), they are still higher than the national rate (13.2%) (U.S. Census Bureau 2008).

**3.13.2 Environmental Consequences****Preferred Alternative**

Base housing is located north and northeast of the Preferred Alternative site location; however, this area is not considered a low-income or minority housing area and no residents would be displaced as a result of the Proposed Action. The preferred site would be located entirely within Base boundaries for use only by authorized patrons. Kirtland AFB does not contain substantial low-income or minority populations, and the preferred site would be located far enough from off-Base low income neighborhoods to ensure that minority and low-income populations would not be affected. Implementation of the Proposed Action at the preferred site would not result in any significant environmental impacts and would, therefore, not result in any disproportionate impacts to minority or low-income populations.

| <b>Table 3-8</b>   |  |                                    |  |                   |                          |
|--|--|------------------------------------|--|-------------------|--------------------------|
| <b>Socioeconomic Profile of Albuquerque, Bernalillo County, and New Mexico</b> |  |                                    |  |                   |                          |
|  |  | <b>Albuquerque,<br/>New Mexico</b> | <b>Bernalillo<br/>County,<br/>New Mexico</b> | <b>New Mexico</b> | <b>United<br/>States</b> |
| Total Population   |  | 514,895                            | 635,139                                      | 1,984,356         | 304,059,728              |
| Sex  | Male (%)                                       | 48.8                               | 49.1   | 49.4              | 49.3                     |
|  | Female (%)                                     | 51.2                               | 50.9   | 50.6              | 50.7                     |
| Race   | White (%)                                      | 71.2                               | 71.1   | 73.4              | 75.0                     |
|  | Black or African America (%)                   | 3.8                                | 3.4  | 2.3               | 12.4                     |
|  | American Indian and Alaska Native (%)          | 4.6                                | 4.9  | 9.2               | 0.8                      |
|  | Asian (%)                                      | 2.6                                | 2.2  | 1.4               | 4.4                      |
|  | Native Hawaiian and Other Pacific Islander (%) | <0.1                               | <0.1   | <0.1              | 0.1                      |
|  | Some Other Race (%)                            | 15.0                               | 15.2   | 10.5              | 4.9                      |
|  | Two or More Races (%)                          | 2.9                                | 3.2  | 3.2               | 2.3                      |
|  | Hispanic or Latino (%) <sup>(a)</sup>          | 44.2                               | 45.8   | 44.9              | 15.4                     |
| Per Capita Income  |  | \$26,024                           | \$26,140                                     | \$23,089          | \$27,589                 |
| Poverty rate - % of population below poverty level                             |  | 15.0%                              | 14.9%  | 17.1%             | 13.2%                    |

Source: U.S. Census Bureau, 2008 American Community Survey 1-Year Estimates

Note:

(a) Hispanic or Latino can be of any race and therefore could cause double counting which would result in a total of more than 100%.

**No Action Alternative**

Implementation of the No Action Alternative would not require the construction of a new facility and would result in the continued use of the existing facilities. Therefore, no disproportionate

adverse effects to minority or low-income populations would occur as a result of the No Action Alternative.

## **3.14 Protection of Children**

### **3.14.1 Affected Environment**

EO 13045, “Protection of Children from Environmental Health Risks and Safety Risks,” directs federal agencies to identify and assess environmental health and safety risks that may disproportionately affect children and ensure that policies, programs, activities, and standards address disproportionate risks to children that result from environmental health and safety risks. Children may suffer disproportionately from environmental and health safety risks since their body systems are still developing.

The schools nearest to the proposed project site are Sandia Elementary School, located approximately 0.53 mile east-northeast, and Wherry Elementary School, located approximately 0.18 mile southwest. The nearest residential neighborhood is the Pershing Park housing area located north and northeast of the preferred site, and the Gibson Child Development Center is located adjacent to the existing BX on the east side of Texas Street (Figure 2-2).

### **3.14.2 Environmental Consequences**

#### **Preferred Alternative**

Under the Preferred Alternative, the closure of a portion of Pennsylvania Street and the addition of the Texas Street by-pass may result in additional traffic using Texas Street adjacent to the Gibson Child Development Center. The center is accessible on the west by Texas Street and on the east by 1<sup>st</sup> Street. As of September 2009, the center had an enrollment of 200 children, but averages approximately 255 children during the high enrollment period of June to August. There are no crosswalks on Texas Street and the center is not typically accessed by pedestrians. All children attending the center are picked up and dropped off by their parents in designated areas within the center’s campus (Mann 2009).

Construction traffic would likely use Texas Street, particularly during construction of the by-pass, but coupled with limited pedestrian traffic in the area and scheduling of construction vehicles during off-peak hours, a short-term increase in construction-related traffic is not anticipated to cause a significant increased risk to children. Similarly, the potential increase in traffic during operation of the Proposed Action is not anticipated to disproportionately risk the health or safety of children since Texas Street is not typically used for pedestrian access to the center.



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Given the distances between the preferred site and the elementary schools, the Preferred Alternative would not result in a disproportionate environmental health or safety risks to children. As indicated in this EA, no significant environmental resource impacts would be associated with the construction or operation of the Proposed Action at the preferred site. Given the distance between the preferred site and the Gibson Child Development Center, coupled with mitigation measures described herein such as scheduling of construction vehicles during off-peak hours and the use of dust control measures during construction as identified in Section 3.5, it is not anticipated that children would experience any disproportionately significant adverse environmental health or safety impacts from construction or operation of the Proposed Action. Implementation of the Proposed Action at the Preferred Alternative site location would not result in a disproportionate risk to children from environmental health or safety risks.

**No Action Alternative**

Implementation of the No Action Alternative would not require the construction of a new facility, but would result in the continued use of the existing facilities and continuation of existing traffic patterns. No proposed construction would occur, thus conditions would remain unchanged under current operations, and no potential for increased risks to children would result from the No Action Alternative.

## **3.15 Cumulative Impacts**

A cumulative impact is the effect on the environment that could result from the incremental impact of a Proposed Action when added to other past, present, or reasonably foreseeable future actions. Cumulative impacts may result from individually minor but collectively significant actions that can take place over time. The actions proposed under the Preferred Alternative in this EA, in addition to other proposed projects at Kirtland AFB, have the possibility to result in either positive or negative impacts in a cumulative manner. These projects all occur within a specific geographical region of influence and are limited on a temporal basis since they all have the potential to be implemented within a 20-year period, and therefore may increase the potential for cumulative effects. Since access to the Base is limited and no potential effects would be expected to impact areas outside the Base, for purposes of this analysis the region of influence is defined to include the cantonment area of Kirtland AFB. This cumulative impact analysis identifies and defines the scope of other actions and their interrelationship with the Proposed Action. This analysis is consistent with guidance published by the CEQ for implementing NEPA.

### **3.15.1 Past and Present Actions at Kirtland AFB**

Information regarding past, present, and reasonably foreseeable future actions was provided by Kirtland AFB personnel. Past and present actions at Kirtland AFB with the potential for cumulative impacts include the construction of a Logistics Facility as part of the Pararescue and Combat Rescue Officers Training Campus. This project site is located approximately 0.5 miles south of the Preferred Alternative site location, is expected to be completed in July of 2010, and will consist of 25,000 square feet that will be used primarily for medical and equipment supplies and storage. Based upon scheduling and availability of programmed funding, no other major actions are currently anticipated within the region of influence.

Cumulative impacts associated with construction of the Logistics Facility would include an increase in construction traffic and would be mitigated by the phasing of construction vehicles to the area and scheduling of construction vehicle trips during non-peak hours. This action will not add new personnel to the Base, but rather would realign existing personnel; therefore, the action would not create an increase in trips over the Base roadway system, but rather a redistribution of existing trips. Since this is a storage facility, new trips to the area are not anticipated, and since construction of the Logistics Facility is not anticipated to overlap with construction of the Proposed Action, only negligible cumulative impacts to traffic would be expected.

### **3.15.2 Reasonably Foreseeable Future Actions at Kirtland AFB**

Reasonably foreseeable future actions evaluated for potential cumulative impacts include proposed activities associated with the 2008 Dormitory Master Plan, including:

- **Main Enlisted Dormitory Campus:** The Main Enlisted Dormitory Campus is located south of Gibson Boulevard between Texas and 1st Streets, north of “H” Avenue. Three new 120-room dormitories are proposed on this campus to meet the projected demand for 355 rooms for permanent party personnel in 2012. A new three-story pipeline dormitory with 84 rooms (28 per floor) on the main dormitory campus is planned to meet the estimated demand for about 160 students for 58<sup>th</sup> Special Operations Wing (SOW). The four dorms built in 1950 on this main dormitory campus would be demolished in phases (Buildings 20221, 20222, 20351, and 20352). Two of them are surplus to the projected room demand and are recommended for demolition as soon as possible. The other two dorms are in better condition; they would remain on the dormitory inventory until the new dorms are built, and then would be demolished. The campus also includes a large dining hall (Building 20350) that would be replaced. Long-range plans include demolition of Building 20224 – the AAFES Mini-Mall (after construction of the new AAFES Shopping Center) – and demolition of the Sandia Crest Club (Building 20226). A new fitness center would be constructed adjacent to the campus, west of Pennsylvania Street, north of G Avenue, approximately one block west of the existing East Fitness Center (Building 20228). The existing Building 20228 and a portion of Building 20229 would be demolished for construction of the new fitness center.

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- **Dorm Campus 2:** A small dormitory campus on the west side of the Base is located near the flight line between Sherman and Lowry Avenues and Maxwell and Chanute Streets. Building 425, with only 44 rooms used by Pararescue (PJ) pipeline students, is the only dormitory on this campus and will be demolished.
- **Noncommissioned Officer (NCO) Academy Area:** Three visiting airmen dormitories, Buildings 917, 918, and 924, would be demolished. These dormitories are on the west side of the Base, east of the flight line in the present NCO Academy area. The NCO Academy is leaving Kirtland AFB in summer 2009. All three buildings are more than 50 years old and in an area proposed for development as part of the 58<sup>th</sup> SOW campus. As a result of the proposed development of the 58<sup>th</sup> SOW Campus, demolition of Buildings 915, 916, 922, 2586, and eventually 926 is also proposed.
- **Visiting Officers Quarters (VOQs):** The Quality of Life and Modernization/Recapitalization Project would construct two new visitors' quarters to replace outdated VOQ facilities in the Visitors Quarters Complex south of Club Road. The existing VOQs are part of an established complex of 10 VOQ buildings adjoining an all-ranks dining/club facility (Mountain View Club), swimming pool, tennis courts, picnic area, and other amenities in the northeast cantonment area. VOQ Building 22010, with 23 lodging suites, is proposed to be replaced with a two-story structure with 25 suites in approximately the same size structure (approximately 18,000 square feet) on the same site. A new VOQ, Building 22019, would be placed in the southwest portion of the complex, forming a quadrangle with Building 22018. Building 22019 would be similar in size and shape to Building 22018.
- **Mountain View Club:** Building 22000 is an all-ranks dining/club facility within the Visitors Quarters Complex; the Mountain View Club is over 50 years old. It would be demolished and a new club constructed in the general vicinity of the present facility (not yet sited). Details regarding the new Mountain View Club facility have not yet been developed.
- **Pararescue and Combat Rescue Officers (PJ/CRO) Training Campus:** A new education and training campus for PJ/CRO students is being developed north of the flight line, with the student dormitories located at the north end of the campus. The new training campus is on a site in the southeast quadrant of the former Zia Family Housing area, west of Pennsylvania Street, and southwest of the Main Enlisted Dorm Campus. The PJ/CRO program is expected to grow from the current budget-constrained total of 88 graduates a year to about 150 graduates annually (supported by 90 faculty members). Students spend about 40 weeks a year at Kirtland. Although up to 330 students could be in classes concurrently (150 Apprentices, plus 180 Emergency Medical Technician-Paramedic students), budget constraints could continue to restrain program growth. The 2008 dormitory master plan proposed two PJ/CRO pipeline dorms with a total of 162 rooms. The Phase 1 dormitory would have 90 rooms for 180 students. If the room demand grows beyond this level, the Phase 2 dormitory would add 72 rooms for 144 more students. An EA for the PJ/CRO Campus Plan was completed with a FONSI in September 2006. That EA included construction of these proposed dormitories, as well as the education and training facilities, including the Logistics Facility described in Section 3.15.1 as a current project.

Cumulative impacts associated with the Proposed Action and reasonably foreseeable future actions may result from temporary increased construction traffic. The Proposed Action would not be

expected to increase operations traffic because new personnel would not be assigned to the Base. Temporary cumulative impacts could occur depending on the timing of the construction projects. Potential temporary impacts to the western burrowing owl (*Athene cunicularia*), a species of concern to the State of New Mexico, could occur depending on the timing and extent of vegetation removal conducted with the above projects. With the implementation of mitigation measures such as the utilization of proper equipment; implementation of BMPs, phasing of construction activities, adherence to permit requirements, and existing standard operating procedures, as well as other guidance in place at Kirtland AFB, it is anticipated that any cumulative construction impacts would not be significant.

Operations of the new AAFES facility would not result in any significant, long-term, cumulative impacts, as it would essentially result in the same impacts as operations at the existing AAFES facilities.

### **3.16 Unavoidable Adverse Environmental Impacts**

Unavoidable, short-term, negative impacts from implementation of the Proposed Action primarily would be associated with demolition and construction. Construction impacts associated with the Proposed Action could include a periodic increase of fugitive dust emissions; however, these impacts would be minor. The long-term conversion of the undeveloped land to the east and north of the existing BX to a new road (292 feet in length, approximately 12,770 square feet or 0.29 acres) could result in a small amount of habitat loss for species that would otherwise inhabit that land, particularly prairie dogs. Prairie dogs are located in the area of the proposed Texas Street by-pass and would be managed in accordance with the Kirtland AFB Prairie Dog Management Plan.

No significant environmental impacts are anticipated from the proposed demolition and construction activities.

### **3.17 Irreversible and Irretrievable Commitment of Resources**

Implementation of the Proposed Action would result in an irreversible and irretrievable commitment of resources by AAFES and Kirtland AFB. Committed resources would include building materials, supplies, and their costs; labor; planning and engineering costs; infrastructure capacity; funds used for construction; and the land that would be developed. Other committed resources would include water, natural gas, fossil fuels, and electricity used for the demolition of the existing satellite

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pharmacy and construction of the proposed project, as well as for the continued operation of the proposed facility.

## 4 List of Organizations and Individuals Contacted, Reviewers, and Preparers

### 4.1 Individuals Contacted and Reviewers

The following individuals at Kirtland AFB were consulted or reviewed this document:

- Evelyn Watkins, Ph.D., NEPA Program Manager (former), 377 MSG/CEANQ
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## 4.2 List of Preparers

The contractor responsible for preparing this EA is:

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| Valerie Neilson  | Planner                                     | 1                | ▪ Affected Environment<br>▪ Environmental Consequences  |
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| Christina Ringo  | Technical Editor                            | 15               | ▪ Document Editing and Control  |
| Gina Edwards     | Technical Editor                            | 27               | ▪ Document Editing and Control  |

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# **Appendix A**

## **Fugitive Dust Control**

### **Construction Permit Application**

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**ALBUQUERQUE ENVIRONMENTAL HEALTH DEPARTMENT - AIR QUALITY DIVISION**  
**PHYSICAL ADDRESS - ONE CIVIC PLAZA NW, 3<sup>RD</sup> FLOOR, ROOM 3047, ALBUQUERQUE, NEW MEXICO 87102**  
**MAILING ADDRESS - P.O. BOX 1293, ALBUQUERQUE, NEW MEXICO 87103**  
**(505) 768 - 1972 (VOICE) 1-800-659-8331 (NEW MEXICO RELAY) (505) 768 - 1977 (FAX)**



Richard J. Berry, Mayor

APPLICATION FOR A **FUGITIVE DUST CONTROL CONSTRUCTION PERMIT** IN BERNALILLO COUNTY

ALBUQUERQUE - BERNALILLO COUNTY AIR QUALITY CONTROL BOARD REGULATION 20.11.20 NMAC

FUGITIVE DUST CONTROL CONSTRUCTION PERMIT (PERMIT) FOR SURFACE DISTURBANCE AND DEMOLITION

**DIVISION RECEIPT STAMP BELOW THIS LINE**

EFFECTIVE DATE OF THIS APPLICATION FORM: 3/17/08

SUBMITTAL DATE/TIME \_\_\_\_\_

RECEIVED BY \_\_\_\_\_

PERMIT # \_\_\_\_\_

**PART A. - PROJECT INFORMATION AND GENERAL ACTIVITIES**

**(PRINT OR TYPE)**

**A1. PROJECT NAME** \_\_\_\_\_

**A2. PROJECT LOCATION** \_\_\_\_\_

**SUBMIT AS AN ATTACHMENT TO THIS APPLICATION, AN 8 ½" X 11" OR LARGER SITE MAP OR PLAT OF PROJECT LOCATION**

**A3. PROJECT STREET ADDRESS (if available)** \_\_\_\_\_

**A4. MAJOR CROSS STREETS OR INTERSECTION NEARBY** \_\_\_\_\_

**A5. SCOPE OF PROJECT (check all that apply):** ☐ NEW BUILDING(S) CONSTRUCTION ☐ SUBDIVISION DEVELOPMENT ☐ UTILITY IMPROVEMENTS  
☐ STRUCTURE DEMOLITION/RENOVATION ☐ ROADWAY DEVELOPMENT ☐ OTHER (please describe) \_\_\_\_\_

**A6. ACTIVE OPERATIONS (check all that apply):** ☐ SURFACE DISTURBANCE ☐ BULK MATERIAL HAULING OR HANDLING ☐ UNPAVED ROADS  
☐ PAVED ROADS ☐ UTILITY REMOVAL/INSTALLATIONS ☐ STRUCTURE DEMOLITION/RENOVATION ☐ MILLING/GRINDING/CUTTING OF SURFACES  
☐ OTHER (please describe) \_\_\_\_\_

**A7. TOTAL AREA TO BE DISTURBED (acres or square feet)** \_\_\_\_\_ acres Or \_\_\_\_\_ ft<sup>2</sup>

**A8. WILL THERE BE BUILDING DEMOLITION INVOLVED IN THIS PROJECT ?** \_\_\_\_ Yes No \_\_\_\_ If YES, TOTAL CUBIC FEET \_\_\_\_\_ ft<sup>3</sup>

**A FUGITIVE DUST CONTROL CONSTRUCTION PERMIT (PERMIT) APPLICATION IS REQUIRED FOR A BUILDING DEMOLITION PROJECT OF OVER 75,000 FT<sup>3</sup> AND MUST BE RECEIVED BY THE DEPARTMENT 10 BUSINESS DAYS (MON. - FRI. EXCEPT HOLIDAYS) BEFORE THE ANTICIPATED PROJECT START DATE. ASBESTOS NOTIFICATION FOR DEMOLITION/RENOVATION OF ANY COMMERCIAL BUILDING, RESIDENTIAL BUILDING OF 5 OR MORE DWELLINGS, OR RESIDENTIAL STRUCTURE TO BE DEMOLISHED TO BUILD A NON-RESIDENTIAL STRUCTURE MUST BE RECEIVED BY THE DEPARTMENT, USING A SEPARATE FORM, 10 WORKING DAYS (CALENDAR DAYS) BEFORE THE ANTICIPATED PROJECT START DATE. BUILDING DEMOLITIONS IN BERNALILLO COUNTY REQUIRE DEPARTMENT SIGNATURES FOR DUST CONTROL AND ASBESTOS NOTIFICATION BEFORE A DEMOLITION PERMIT WILL BE ISSUED BY THE CITY OR COUNTY.**

**A9. A PERMIT APPLICATION, FOR TOTAL AREA TO BE DISTURBED OF ¾ ACRE UP TO 25 ACRES, MUST BE RECEIVED BY THE AIR QUALITY DIVISION 10 BUSINESS DAYS BEFORE THE ANTICIPATED PROJECT START DATE. A PERMIT APPLICATION, FOR TOTAL AREA TO BE DISTURBED OF MORE THAN 25 ACRES, MUST BE RECEIVED BY THE AIR QUALITY DIVISION 20 BUSINESS DAYS BEFORE THE ANTICIPATED PROJECT START DATE.**

**ANTICIPATED PROJECT START DATE IS:** \_\_\_\_/\_\_\_\_/20\_\_\_\_

**A10. AN APPROVED PERMIT SHALL BE VALID FOR 1 YEAR FROM THE DATE OF APPROVAL BY THE DEPARTMENT OR THE ANTICIPATED PROJECT COMPLETION DATE, WHICHEVER IS LONGER, BUT NO MORE THAN 5 YEARS. IF THE SCOPE OF PROJECT, ACTIVE OPERATIONS, EXPIRATION DATE, TOTAL AREA TO BE DISTURBED, OR CONTROL MEASURE(S) CHANGE IN ANY MANNER THAT ARE DETERMINED BY THE DEPARTMENT TO REQUIRE ADDITIONAL CONDITIONS, THEN A NEW PERMIT SHALL BE REQUIRED. A PERMIT MAY BE RENEWED IF THE DEPARTMENT RECEIVES A WRITTEN REQUEST FROM THE PERMITTEE 10 BUSINESS DAYS PRIOR TO EXPIRATION DATE.**

**ANTICIPATED PROJECT COMPLETION DATE IS:** \_\_\_\_/\_\_\_\_/20\_\_\_\_

**PART A. - PROJECT INFORMATION AND GENERAL ACTIVITIES**

**A11.** (CHECK ONE BOX) ACTIVE OPERATIONS WILL BE THE TOTAL AREA TO BE DISTURBED ☐, **OR**, ACTIVE OPERATIONS WILL BE PHASED ☐

**A12.** IF PHASING OF ACTIVE OPERATIONS (Explain Phasing Plan and include Total Disturbed Area, in acres, at any given time) \_\_\_\_\_

**A13.** IS A SITE DRAINAGE PLAN REQUIRED FOR THIS PROJECT? YES \_\_\_\_\_ NO \_\_\_\_\_

**A14.** IF YES TO **A13** ABOVE, IS DRAINAGE PLAN APPROVED AND AVAILABLE UPON REQUEST BY THE DEPARTMENT? YES \_\_\_\_\_ NO \_\_\_\_\_

**A15.** EXPECTED VOLUME OF BULK MATERIAL (ON SITE FILL, IMPORTED FILL, BASE COARSE GRAVEL, ETC.) TO BE HANDLED DURING THE DURATION OF THIS PROJECT (in cubic yards) \_\_\_\_\_ yds<sup>3</sup>

**A16.** VOLUME OF BULK MATERIAL TO BE IMPORTED TO THIS PROJECT SITE \_\_\_\_\_ yds<sup>3</sup>

**A17.** ADDRESS OF LOCATION(S) FROM WHICH BULK MATERIAL WILL BE IMPORTED TO THIS PROJECT SITE \_\_\_\_\_

**A18.** DO THE BERNALILLO CNTY. LOCATIONS, PROVIDING BULK MATERIAL TO THIS PROJECT, HAVE PERMITS?  
YES \_\_\_\_\_ NO \_\_\_\_\_ UNKNOWN \_\_\_\_\_

**A19.** VOLUME OF BULK MATERIAL TO BE EXPORTED FROM THIS PROJECT SITE \_\_\_\_\_ yds<sup>3</sup>

**A20.** ADDRESS OF LOCATION(S) IN BERNALILLO CNTY. THAT WILL RECEIVE BULK MATERIAL EXPORTED FROM THIS PROJECT SITE \_\_\_\_\_

**A21.** DO THE BERNALILLO CNTY. LOCATIONS, RECEIVING BULK MATERIAL FROM THIS PROJECT, HAVE PERMITS?  
YES \_\_\_\_\_ NO \_\_\_\_\_ UNKNOWN \_\_\_\_\_

**A22.** WILL STOCKPILES BE CONSTRUCTED ON THIS SITE? YES \_\_\_\_\_ NO \_\_\_\_\_

**A23.** IF YES TO **A22** ABOVE, GIVE GENERAL DIMENSIONS OF THE STOCKPILE(S) IN FEET \_\_\_\_\_ LENGTH \_\_\_\_\_ WIDTH \_\_\_\_\_ HEIGHT \_\_\_\_\_

**PART B. - REASONABLY AVAILABLE CONTROL MEASURES** THE “PERMITTEE” SHALL INCLUDE IN THE PERMIT APPLICATION ONE OR MORE OF THE APPLICABLE REASONABLY AVAILABLE CONTROL MEASURES GIVEN IN PART B.1 – B.13 **OR** ONE OR MORE OTHER (ALTERNATIVE) FUGITIVE DUST CONTROL MEASURES, INCLUDING MEASURES TAKEN TO COMPLY WITH ANY OTHER STATUTE OR REGULATION THAT WOULD ALSO EFFECTIVELY CONTROL FUGITIVE DUST DURING ACTIVE AND INACTIVE OPERATIONS.

**ATTENTION: AT MINIMUM, ALL PROJECTS REQUIRING A PERMIT SHALL: 1) UTILIZE PAVED OR GRAVEL ENTRY/EXIT APRONS, STEEL GRATES OR OTHER DEVICES CAPABLE OF REMOVING MUD AND BULK MATERIAL FROM VEHICLE TRAFFIC TIRES; AND 2) ERECT A PROPERLY MAINTAINED FABRIC FENCING MATERIAL AROUND THE PERIMETER OF THE DISTURBED SURFACE AREA WITH OPENINGS NO WIDER THAN NECESSARY TO ALLOW VEHICLES TO ENTER OR EXIT THE AREA.**

IF THE “PERMITTEE” CHOOSES TO SUBMIT, AS AN ATTACHMENT TO THIS APPLICATION, AN ALTERNATIVE FUGITIVE DUST CONTROL PLAN (PLAN) IN LIEU OF THE CONTROL MEASURES GIVEN IN PART B.1 – B.13, THE ALTERNATIVE PLAN (SUCH AS A STORM WATER POLLUTION PREVENTION PLAN) MUST INCLUDE DETAILED INFORMATION THAT ADDRESSES: 1) THE STEADY ONGOING REASONABLY AVAILABLE CONTROL MEASURES TO MITIGATE THE RELEASE OF FUGITIVE DUST FROM ACTIVE AND INACTIVE DISTURBED SURFACE AREAS; 2) FUGITIVE DUST CONTROL CONTINGENCY MEASURES THAT WILL BE USED; AND 3) ACTION(S) TO BE TAKEN TO MITIGATE PROPERTY DAMAGE (SEE PART C OF THIS APPLICATION). IF SUBMITTING AN ALTERNATIVE PLAN YOU STILL MUST COMPLETE AND INITIAL PARTS A, D, E, F, G, H, AND I (IF UTILIZED) OF THIS APPLICATION.

**B1. UNPAVED ROADWAYS [check applicable box(es)]:**

- a. ☐ paving with recycled asphalt, maintained asphalt millings, asphaltic concrete, concrete, or petroleum products legal for such use;
- b. ☐ using dust suppressants applied in amounts, frequency and rates recommended by the manufacturer, and maintained as recommended by the manufacturer; submit manufacturer’s information as an attachment to this application
- c. ☐ using wet suppression;
- d. ☐ using traffic controls, including decreased speed limits with appropriate enforcement; other traffic calming methods, vehicle access restrictions and controls; road closures or barricades; and off-road vehicle access controls and closures;
- e. ☐ other (alternative) \_\_\_\_\_

**B2. PAVED ROADWAYS [check applicable box(es)]:**

- a. ☐ cleaning up spillage and track out as necessary to prevent particulates from being pulverized and entrained into the atmosphere;
- b. ☐ using on-site wheel washes;
- c. ☐ performing regularly scheduled vacuum street cleaning or wet sweeping with a sweeper certified by the manufacturer to be efficient at removing particulate matter having an aerodynamic diameter of less than 10 microns (i.e. PM<sub>10</sub>);
- d. ☐ other (alternative) \_\_\_\_\_

**B3. TRUCKS HAULING BULK MATERIALS ON PUBLIC AND PRIVATE ROADWAYS [check applicable box(es)]:**

- a. ☐ using properly secured tarps or cargo covering that covers the entire surface area of the load;
- b. ☐ preventing leakage from the truck bed, sideboards, tailgate, or bottom dump gate;
- c. ☐ using wet suppression to increase moisture content of the bulk materials being hauled;
- d. ☐ using dust suppressants applied in amounts, frequency and rates recommended by the manufacturer, and maintained as recommended by the manufacturer; submit manufacturer's information as an attachment to this application
- e. ☐ maintaining a minimum of 6 inches of freeboard below the rim of the truck bed. Freeboard means the vertical distance from the highest portion of the load abutting the bed and the lowest part of the top rim of the truck bed abutting the load;
- f. ☐ other (alternative) \_\_\_\_\_

**B4. ACTIVE OPERATIONS IN CONSTRUCTION AREAS AND OTHER SURFACE DISTURBANCES [check applicable box(es)]:**

- ☐ **SHORT TERM** control measures shall include (check this box first if utilizing short term measures listed below):
  - a. ☐ wet suppression;
  - b. ☐ using dust suppressants applied in amounts, frequency and rates recommended by the manufacturer, and maintained as recommended by the manufacturer; submit manufacturer's information as an attachment to this application
  - c. ☐ temporary upwind windbreaks, including fabric fences with the top at least 4 feet above grade, and with the bottom of the fence sufficiently anchored to the ground to prevent material from blowing underneath the fence; all windbreaks and fabric fences shall be maintained in an upright and functional condition at all times until no longer needed to prevent or abate fugitive dust; all accumulated material on the windward side of the windbreak shall be periodically removed to prevent failure of the windbreak;
  - d. ☐ watering the site at the end of each workday sufficient to stabilize the work area;
  - e. ☐ applying dust suppressants in amounts, frequency and rates recommended by the manufacturer on the worksite at the end of each work week if no active operations are going to take place over the weekend or if active operations stop for more than two consecutive days;
  - f. ☐ starting construction at the location that is upwind from the prevailing wind direction and stabilizing disturbed areas before disturbing additional areas;
  - g. ☐ clean up and removal of track-out material;
  - h. ☐ other (alternative) \_\_\_\_\_

**B5. ACTIVE OPERATIONS IN CONSTRUCTION AREAS AND OTHER SURFACE DISTURBANCES [check applicable box(es)]:**

- ☐ **LONG TERM** control measures shall include (check this box first if utilizing long term measures listed below):
  - a. ☐ site stabilization using dust suppressants applied in amounts, frequency and rates recommended by the manufacturer, and maintained as recommended by the manufacturer; submit manufacturer's information as an attachment to this application
  - b. ☐ reseeding using guidelines in 20.11.20.24 NMAC – NATIVE GRASS SEEDING AND MULCH SPECIFICATIONS;
  - c. ☐ xeriscaping;
  - d. ☐ installing parallel rows of fabric fencing or other windbreaks set perpendicular to the prevailing wind direction either onsite or on a nearby property with the permission of the nearby property owner;
  - e. ☐ surfacing with gravel or other mulch material of a size and density sufficient to prevent surface material from becoming airborne;
  - f. ☐ mulching and crimping of straw or hay using guidelines in Section 20.11.20.24 NMAC;
  - g. ☐ installing permanent perimeter and interior walls;
  - h. ☐ conventional landscaping techniques;
  - i. ☐ clean up and removal of track-out material;
  - j. ☐ other (alternative) \_\_\_\_\_



**B6. BULK MATERIAL HANDLING [check applicable box(es)]:**

- a. ☐ using spray bars;
- b. ☐ applying wetting agents (surfactants) to bulk material;
- c. ☐ using wet suppression through manual or mechanical application;
- d. ☐ adding dust suppressants to bulk materials applied in amounts, frequency and rates recommended by the manufacturer, and maintained as recommended by the manufacturer; submit manufacturer's information as an attachment to this application
- e. ☐ reducing process speeds;
- f. ☐ reducing drop heights;
- g. ☐ other (alternative) \_\_\_\_\_

**B7. INDUSTRIAL SITES [check applicable box(es)]:**

- a. ☐ paving roadways and parking area with recycled asphalt, routinely-maintained asphalt millings, asphaltic concrete, concrete, or petroleum products legal for such use;
- b. ☐ performing regularly scheduled vacuum street cleaning or wet sweeping;
- c. ☐ regularly using wet suppression on unpaved areas;
- d. ☐ using dust suppressants applied in amounts, frequency and rates recommended by the manufacturer, and maintained as recommended by the manufacturer; SUBMIT MANUFACTURER'S INFORMATION AS AN ATTACHMENT TO THIS APPLICATION
- e. ☐ installing wind breaks;
- f. ☐ installing enclosures;
- g. ☐ installing on-site anemometers to measure wind speed; the anemometer should trigger a suitable warning mechanism such as a strobe light or audible alarm (that will not violate any applicable noise ordinance) to notify on-site personnel of high winds;
- h. ☐ increasing wet suppression applications before and during high wind conditions;
- i. ☐ other (alternative) \_\_\_\_\_

**B8. DEMOLITION/RENOVATION ACTIVITIES (NON-ASBESTOS CONTAINING MATERIALS PRESENT) [check applicable box(es)]:**

- a. ☐ using constant wet suppression on the debris piles during demolition;
- b. ☐ using water or dust suppressants on the debris pile, applied in amounts, frequency and rates recommended by the manufacturer, and maintained as recommended by the manufacturer; submit manufacturer's information as an attachment to this application
- c. ☐ using enclosures;
- d. ☐ using curtains or shrouds;
- e. ☐ using negative pressure dust collectors;
- f. ☐ other (alternative) \_\_\_\_\_

**B9. MILLING, GRINDING OR CUTTING OF PAVED OR CONCRETE SURFACES [check applicable box(es)]:**

- a. ☐ constantly using wet suppression;
- b. ☐ ongoing clean up of milled, ground or cut material by using wet sweeping;
- c. ☐ using dust suppressants applied in amounts, frequency and rates recommended by the manufacturer, and maintained as recommended by the manufacturer; submit manufacturer's information as an attachment to this application
- d. ☐ using enclosures;
- e. ☐ using curtains or shrouds;
- f. ☐ other (alternative) \_\_\_\_\_

**B10. PRESSURE BLASTING OPERATIONS [check applicable box(es)]:**

- a. ☐ using non-friable abrasive material;
- b. ☐ using curtains, enclosures or shrouds;
- c. ☐ using negative pressure dust collectors;
- d. ☐ using constant wet suppression;
- e. ☐ maintaining ongoing clean up of abrasive material;
- f. ☐ other (alternative) \_\_\_\_\_

**B11. STOCKPILE FORMATION** Stockpiles shall be no higher than 15 feet above the existing natural or man-made grade that abuts the stockpile, unless otherwise approved in advance and in writing by the department [check applicable box(es)]:

**Active Stockpiles:**

- a. ☐ applying wet suppression on a regular basis;
- b. ☐ utilizing windbreaks (fabric fencing or other materials);
- c. ☐ reducing vehicle speeds or using other traffic calming measures (for example – sculpted piles for less abrasive wind effect);
- d. ☐ restricting access to stockpile areas during non-work hours;
- e. ☐ other (alternative) \_\_\_\_\_

**Inactive Stockpiles:**

- a. ☐ maintaining a stable outer crust over stockpile area;
- b. ☐ using dust suppressants applied in amounts, frequency and rates recommended by the manufacturer, and maintained as recommended by the manufacturer; submit manufacturer's information as an attachment to this application
- c. ☐ restricting access to stockpile areas;
- d. ☐ utilizing windbreaks (fabric fencing or other materials);
- e. ☐ other (alternative) \_\_\_\_\_

**B12. SPRAY PAINTING AND OTHER COATINGS** [check applicable box(es)]:

- a. ☐ using enclosures that comply with applicable fire codes;
- b. ☐ using curtains, enclosures or shrouds;
- c. ☐ other (alternative) \_\_\_\_\_

**B13. HIGH WIND CONTINGENCY MEASURES** [check applicable box(es)]:

IT IS REQUIRED DURING A HIGH WIND EVENT THAT ALL FUGITIVE DUST SOURCES CEASE ALL ACTIVE OPERATIONS THAT ARE CAPABLE OF PRODUCING FUGITIVE DUST, CONTINUE TO USE REASONABLY AVAILABLE CONTROL MEASURES, AND IMPLEMENT HIGH WIND CONTINGENCY MEASURES. A HIGH WIND EVENT IS A CONDITION ANNOUNCED BY THE DEPARTMENT OF WIND SPEEDS OF APPROXIMATELY 30 MILES PER HOUR OR GREATER THAT, WHEN ACCOMPANIED BY DRY SOIL CONDITIONS, IS LIKELY TO RESULT IN WIDESPREAD REDUCED VISIBILITY DUE TO BLOWING FUGITIVE DUST AND MAY RESULT IN ELEVATED PARTICULATE LEVELS THAT MAY CONTRIBUTE TO AN EXCEEDANCE OR VIOLATION OF AMBIENT AIR QUALITY STANDARDS.

- a. ☐ installing and using on-site anemometers to measure wind speed; the anemometer should trigger a suitable warning mechanism such as a strobe light or audible alarm (that will not violate any applicable noise ordinance) to notify site personnel of high winds;
- b. ☐ using constant wet suppression;
- c. ☐ using dust suppressants applied in amounts and rates recommended by the manufacturer; submit manufacturer's information as an attachment to this application
- d. ☐ using wetting agents or surfactants on disturbed areas, bulk materials or stockpiles;
- e. ☐ other (alternative) \_\_\_\_\_

**PART C. - FUGITIVE DUST CONTROL PLAN (PLAN)**

(PRINT OR TYPE)

THE "PERMITTEE" IS REQUIRED TO COMPLY WITH A PLAN THAT DETAILS THE FUGITIVE DUST CONTROL MEASURES THAT WILL BE USED TO MITIGATE THE RELEASE OF FUGITIVE DUST FROM ACTIVE AND INACTIVE DISTURBED SURFACE AREAS. THIS INCLUDES: STEADY ONGOING REASONABLY AVAILABLE CONTROL MEASURES, CONTINGENCY MEASURES, AND ACTION(S) THAT WILL BE TAKEN TO MITIGATE CLAIMS OF PROPERTY DAMAGE. IF YOU ARE NOT SUBMITTING AS AN ATTACHMENT TO THIS APPLICATION AN ALTERNATIVE PLAN, THEN COMPLETE PART C.1 - C.3 BELOW TO COMPLETE YOUR PLAN.

C1. Describe in detail the steady ongoing Reasonably Available Control Measures that you may have selected in Part B.1 – B.13 of this application that will be used during this project to mitigate the release of Fugitive Dust from Active Disturbed Surface Areas (any current operation capable of creating dust) AND Inactive Disturbed Surface Areas (previously disturbed areas where active operations are temporarily suspended). Examples are: Type, size and quantity of equipment that will be used for wet suppression, and frequency of use; Type and locations of fencing or walls that will be installed; Frequency of use of vacuum or wet sweeping; Temporary pavements, Seeding plan; etc.).

ACTIVE - \_\_\_\_\_

INACTIVE - \_\_\_\_\_

C2. Describe in detail the additional fugitive dust control Contingency Measures that will be used during this project if the Reasonably Available Control Measures chosen in Part B.1 – B.13 and detailed in Part C.1 are determined by the department to be insufficient to provide adequate Fugitive Dust Control during Active and Inactive Operations.

ACTIVE - \_\_\_\_\_

INACTIVE - \_\_\_\_\_

C3. DESCRIBE THE ACTION(S) TO BE TAKEN TO MITIGATE CLAIMS OF PROPERTY DAMAGE BY FUGITIVE DUST GENERATED AT/FROM THIS PROJECT.

**PART D. - HIGH WIND EVENT**

(PRINT OR TYPE)

**A HIGH WIND EVENT IS A CONDITION ANNOUNCED BY THE DEPARTMENT OF WIND SPEEDS OF APPROXIMATELY 30 MILES PER HOUR OR GREATER THAT, WHEN ACCOMPANIED BY DRY SOIL CONDITIONS, IS LIKELY TO RESULT IN WIDESPREAD REDUCED VISIBILITY DUE TO BLOWING FUGITIVE DUST AND MAY RESULT IN ELEVATED PARTICULATE LEVELS THAT MAY CONTRIBUTE TO AN EXCEEDANCE OR VIOLATION OF AMBIENT AIR QUALITY STANDARDS. ALL FUGITIVE DUST SOURCES SHALL CEASE ALL ACTIVE OPERATIONS THAT ARE CAPABLE OF PRODUCING FUGITIVE DUST, CONTINUE TO USE REASONABLY AVAILABLE CONTROL MEASURES, AND IMPLEMENT HIGH WIND CONTINGENCY MEASURES DURING A HIGH WIND EVENT.**

D1. DESCRIBE IN DETAIL HOW THE HIGH WIND CONTINGENCY MEASURE(S) CHOSEN WILL BE USED DURING THIS PROJECT \_\_\_\_\_

**PART E. - HIGH WIND AFFIRMATIVE DEFENSE**

**ATTENTION !!!**

**TO ASSERT A HIGH WIND AFFIRMATIVE DEFENSE, THE PERMITTEE AGREES TO USE ONE OF THE THREE MANDATORY CONTROL MEASURES SHOWN BELOW THROUGHOUT THE ENTIRE DURATION OF THE PERMIT, REGARDLESS OF WHETHER OR NOT A HIGH WIND EVENT EXISTS.**

**DO YOU WISH TO QUALIFY FOR A HIGH WIND AFFIRMATIVE DEFENSE DURING THE DURATION OF THIS PERMIT? YES \_\_\_\_ NO \_\_\_\_**

**IF THE ANSWER IS YES, THEN CHECK ONE OF THE REQUIRED SET OF CONTROL MEASURES SHOWN IN E1 – E3 BELOW.**

- E1. ☐ (A) Using wet suppression sufficient to attain and maintain eighty percent of the optimal moisture content of the soil, as determined by a standard or modified proctor analysis performed by a certified public or private materials testing laboratory. At three equally spaced timeframes during the workday, three tests for soil moisture content shall be performed at three separate representative locations on the permitted property, which will result in a minimum of nine tests per day. Each set of three tests shall average eighty percent of the optimal moisture content of the soil and no individual test shall be less than seventy percent of the optimal moisture content. Failure of any three set sample of tests to meet these standards shall require the taking of immediate action necessary and re-testing of non-compliant areas until the standards are met; (B) maintain fabric fencing material around the perimeter of the disturbed surface area with openings no wider than necessary to allow vehicles to enter or exit the area (fencing shall be anchored 6 inches below the surface on the bottom edge and shall be 24 or more inches above the existing natural or manmade surface); and (C) during a High Wind Event ceasing all Active Operations but continuing to use all control measures.
- E2. ☐ (A) Using chemical dust suppressants, in amounts, frequency and rates recommended by the manufacturer, and maintained as recommended by the manufacturer sufficient to substantially reduce fugitive dust leaving the project area while Active Operations are idle; (B) maintain fabric fencing material around the perimeter of the disturbed surface area with openings no wider than necessary to allow vehicles to enter or exit the area (fencing shall be anchored 6 inches below the surface on the bottom edge and shall be 24 or more inches above the existing natural or manmade surface); and (C) during a High Wind Event ceasing all Active Operations but continuing to use all control measures.
- E3. ☐ (A) Submit an alternative dust control plan, for department approval, that provides fugitive dust control that is deemed equal to or better than using the measures described in options E1 or E2 above; and (B) during a High Wind Event ceasing all Active Operations but continuing to use all control measures.

APPLICATION REVIEW FOR A FUGITIVE DUST CONSTRUCTION PERMIT REQUIRES A FILING & REVIEW FEE, AND AN INSPECTION FEE.

## F1. FILING &amp; REVIEW FEE TABLE

| TOTAL PROJECT ACREAGE TO BE DISTURBED   | FILING & REVIEW FEE | CHECK APPROPRIATE BOX |
|---|---------------------|-----------------------|
| $\frac{3}{4}$ acre to less than 2 acres | \$250.00            |                       |
| 2 acres to less than 5 acres            | \$350.00            |                       |
| 5 acres to less than 15 acres           | \$450.00            |                       |
| 15 acres or greater                     | \$550.00            |                       |

INSPECTION FEE

MULTIPLY THE TOTAL PROJECT ACREAGE TO BE DISTURBED BY THE PER - ACRE RATE SHOWN IN THE TABLE BELOW. THE TOTAL PROJECT ACREAGE TO BE DISTURBED MUST BE EXPRESSED AS A WHOLE NUMBER. IF THE NUMBER AFTER THE DECIMAL POINT IS LESS THAN 5, THE WHOLE NUMBER REMAINS UNCHANGED. IF THE NUMBER AFTER THE DECIMAL POINT IS 5 OR GREATER, THE WHOLE NUMBER SHALL BE ROUNDED UP TO THE NEXT WHOLE NUMBER. ROUNDING OF ACRES SHALL OCCUR BEFORE THE INSPECTION FEE IS CALCULATED.

## F2. INSPECTION FEE TABLE

| TOTAL PROJECT ACREAGE TO BE DISTURBED<br>(ROUNDED TO NEAREST WHOLE NUMBER) | TIMES | PER ACRE RATE<br>(BASED ON 20.11.2.15 NMAC) | INSPECTION FEE |
|--|-------|---|----------------|
|  | x     | \$100.00                                    | = \$ .00       |

TOTAL PROJECT FEE – ADD THE FILING & REVIEW FEE AND THE INSPECTION FEE ABOVE TO DETERMINE THE TOTAL PROJECT FEE.

## F3. TOTAL PROJECT FEE TABLE

| FILING & REVIEW FEE | PLUS | INSPECTION FEE | TOTAL PROJECT FEE DUE |
|---------------------|------|----------------|-----------------------|
| \$ .00              | +    | \$ .00         | = \$ .00              |

## NOTE:

IF AN APPLICATION TO OBTAIN A PERMIT IS SUBMITTED AFTER ACTIVE OPERATIONS HAVE COMMENCED AT THE PROJECT LOCATION, A LATE FEE OF 50 PERCENT OF THE TOTAL PROJECT FEE SHALL BE ASSESSED IN ADDITION TO THE TOTAL PROJECT FEE. IN ADDITION TO THIS LATE FEE FOR APPLICATION PROCESSING AND PERMIT ISSUANCE, CIVIL PENALTY'S MAY BE ASSESSED PURSUANT TO THE NEW MEXICO AIR QUALITY CONTROL ACT, CHAPTER 74, ARTICLE 2 NEW MEXICO STATUTES ANNOTATED 1978.

USE THE CALCULATION BELOW ONLY IF YOU ARE REQUIRED TO SUBMIT A LATE FEE.

TOTAL PROJECT FEE DUE: \$ .00 X 1.5 (LATE FEE FACTOR) = \$ .00 TOTAL PROJECT/LATE FEE DUE

## NOTE:

TOTAL PROJECT FEE DUE OR TOTAL PROJECT/LATE FEE DUE, REQUIRED TO BE PAID AT THE TIME OF APPLICATION SUBMITTAL, SHALL BE PAID BY CHECK OR MONEY ORDER PAYABLE TO: CITY OF ALBUQUERQUE, PERMITS PROGRAM (FUND 242 – ACCOUNT # 0421425). APPLICATION AND ACCOMPANYING FEE MAY BE DELIVERED BY MAIL TO THE ADDRESS THAT APPEARS AT THE TOP OF PAGE 1 OF THIS FORM OR HAND DELIVERED TO THE SAME ADDRESS (BETWEEN THE HOURS OF 8:00 AM - 4:30 PM MON. THROUGH FRI.). CALL 768-1972 IF HAND DELIVERING APPLICATION AND FEE TO INSURE THAT APPROPRIATE STAFF IS AVAILABLE TO PROCESS A RECEIPT.

## NOTE:

THE PERMITTEE SHALL INSTALL AND MAINTAIN A FUGITIVE DUST CONTROL PROJECT SIGN, ISSUED OR APPROVED BY THE DEPARTMENT.

**PART G. – SIGNATURE AUTHORITY OF PERMITTEE**

**BY SIGNING BELOW, THE APPLICANT CERTIFIES THAT THE INFORMATION PROVIDED IN THIS APPLICATION FOR A PERMIT IS TRUE, ACCURATE AND COMPLETE, AND THE APPLICANT AGREES TO BE THE “PERMITTEE”. THE “PERMITTEE” IS RESPONSIBLE FOR COMPLYING WITH THE PERMIT, PLAN, AND ALL REQUIREMENTS OF PART 20.11.20 NMAC. FAILURE TO COMPLY SHALL BE A VIOLATION OF PART 20.11.20 NMAC.**

|   |   |                           |          |
|---|---|---------------------------|----------|
| <b>THE PERMITTEE SIGNATURE BOX MUST BE COMPLETED (COMPLETE ALL APPLICABLE INFORMATION)</b>  |   |                           |          |
| PRINT PERMITTEE’S BUSINESS NAME   | EMAIL ADDRESS OF PERMITTEE                      | FAX NUMBER OF PERMITTEE   |          |
| PHONE NUMBER OF PERMITTEE   | CELL PHONE OF PERMITTEE                         | PAGER NUMBER OF PERMITTEE |          |
| MAILING ADDRESS OF PERMITTEE  | CITY  | STATE                     | ZIP CODE |
| PRINT NAME OF INDIVIDUAL SIGNING FOR PERMITTEE  | PRINT TITLE OF INDIVIDUAL SIGNING FOR PERMITTEE |                           |          |
| SIGNATURE OF PERMITTEE  | INITIALS OF PERMITTEE                           | DATE SUBMITTED            |          |
| <b>IT IS THE RESPONSIBILITY OF THE PERMITTEE OR DESIGNATED RESPONSIBLE PERSON OR OFFICIAL TO ENSURE THAT THE PERMIT OR AMENDED PERMIT CONTAINS CURRENT CONTACT INFORMATION AND THAT A <u>COPY IS MAINTAINED AT THE WORK SITE AND IS PROVIDED TO THE DEPARTMENT.</u> FAILURE TO MAINTAIN AND PROVIDE UP-TO-DATE CONTACT INFORMATION SHALL BE A VIOLATION OF 20.11.20 NMAC.</b> |   |                           |          |

**PART H. – OWNER OR OPERATOR INFORMATION :**

COMPLETE THE OWNER OR OPERATOR INFORMATION BELOW ONLY IF DIFFERENT THAN THE PERSON WHO HAS SIGNED AS THE PERMITTEE IN SECTION G - OR AS A RESPONSIBLE PERSON(S) IN SECTION I OF THIS APPLICATION FOR A FUGITIVE DUST CONTROL CONSTRUCTION PERMIT.

**IF THE PERMITTEE FAILS TO COMPLY WITH THE PROVISIONS OF 20.11.20 NMAC – FUGITIVE DUST CONTROL, THE OWNER OR OPERATOR, IF DIFFERENT FROM A RESPONSIBLE PERSON OR THE PERMITTEE, SHALL BE RESPONSIBLE FOR COMPLYING WITH THE PERMIT AND TAKE ALL REQUIRED ACTIONS TO PREVENT A VIOLATION OF 20.11.20 NMAC – FUGITIVE DUST CONTROL, AND SHALL BE RESPONSIBLE TO TAKE ALL ACTIONS REQUIRED TO SATISFACTORILY RESOLVE A VIOLATION OF 20.11.20 NMAC – FUGITIVE DUST CONTROL, INCLUDING STOPPING ALL ACTIVE OPERATIONS, IF NECESSARY. FAILURE TO COMPLY SHALL BE A VIOLATION OF 20.11.20 NMAC – FUGITIVE DUST CONTROL.**

|   |   |  |                                       |
|---|---|--|---------------------------------------|
| <b><u>IS THE INFORMATION IN THIS SIGNATURE BOX REPRESENTATIVE OF (CHECK ONE):</u></b> |   |  |                                       |
| <input type="checkbox"/> <b><u>PROJECT OWNER</u></b>                                  | <input type="checkbox"/> <b><u>PROJECT OPERATOR</u></b> | <input type="checkbox"/> <b><u>BOTH</u></b>                  | (COMPLETE ALL APPLICABLE INFORMATION) |
| PRINT PROJECT OWNER/OPERATOR’S BUSINESS NAME  |   | PRINT TITLE OF INDIVIDUAL SIGNING FOR PROJECT OWNER/OPERATOR |                                       |
| PRINT NAME OF INDIVIDUAL SIGNING FOR PROJECT OWNER/OPERATOR                           |   |  |                                       |
| SIGNATURE OF PROJECT OWNER/OPERATOR   | INITIALS OF PROJECT OWNER/OPERATOR                      | DATE SIGNED  |                                       |
| MAILING ADDRESS OF PROJECT OWNER/OPERATOR   | CITY  | STATE  | ZIP CODE                              |
| PHONE OF PROJECT OWNER/OPERATOR   | CELL OF PROJECT OWNER/OPERATOR                          | FAX OF OWNER/OPERATOR  |                                       |
| EMAIL ADDRESS OF PROJECT OWNER/OPERATOR   |   |  |                                       |

**PART I. – SIGNATURE AUTHORITY OF RESPONSIBLE PERSON**

**RESPONSIBLE PERSON MEANS THE PERSON DESIGNATED IN A PERMIT WHO IS RESPONSIBLE FOR COMPLYING WITH THE PERMIT, PLAN AND 20.11.20 NMAC – FUGITIVE DUST CONTROL, TO THE EXTENT SPECIFIED IN THE PERMIT. A RESPONSIBLE PERSON CAN BE THE PERMITTEE, THE OWNER, THE OPERATOR, OR ANOTHER PERSON(S).**

**IF MORE THAN 1 INDIVIDUAL WILL BE DESIGNATED AS A RESPONSIBLE PERSON AT THE TIME OF THIS APPLICATION SUBMITTAL, MAKE PHOTOCOPIES OF THIS PAGE BEFORE COMPLETING ANY INFORMATION. AFTER THE ISSUANCE OF THE PERMIT, THE DEPARTMENT MAY APPROVE IN WRITING AN AMENDMENT TO THE PERMIT TO ADD OR CHANGE A DESIGNATED RESPONSIBLE PERSON(S).**

|  |   |             |          |
|--|---|-------------|----------|
| PRINT RESPONSIBLE PERSON’S BUSINESS NAME   | PRINT NAME OF INDIVIDUAL SIGNING AS A RESPONSIBLE PERSON  |             |          |
| PRINT TITLE OF INDIVIDUAL SIGNING AS A RESPONSIBLE PERSON                                    | DATE SIGNED   |             |          |
| SIGNATURE OF INDIVIDUAL SIGNING AS A RESPONSIBLE PERSON                                      | INITIALS OF INDIVIDUAL SIGNING AS A RESPONSIBLE PERSON  |             |          |
| ADDRESS OF INDIVIDUAL SIGNING AS A RESPONSIBLE PERSON  | CITY  | STATE       | ZIP CODE |
| PHONE OF INDIVIDUAL SIGNING AS A RESPONSIBLE PERSON  | CELL OF INDIVIDUAL SIGNING AS A RESPONSIBLE PERSON  |             |          |
| PAGER OF INDIVIDUAL SIGNING AS A RESPONSIBLE PERSON  | FAX OF INDIVIDUAL SIGNING AS A RESPONSIBLE PERSON   |             |          |
| EMAIL OF INDIVIDUAL SIGNING AS A RESPONSIBLE PERSON  | ACTIVE OPERATION RESPONSIBILITIES OF INDIVIDUAL SIGNING AS A RESPONSIBLE PERSON [ACTIVITY(IES)] |             |          |
| SIGNATURE OF PERMITTEE APPROVING THE DESIGNATION OF ABOVE INDIVIDUAL AS A RESPONSIBLE PERSON |   | DATE SIGNED |          |

**BY SIGNING ABOVE AS A RESPONSIBLE PERSON YOU WILL BE DESIGNATED IN THE PERMIT ISSUED BY THE DEPARTMENT AS RESPONSIBLE FOR COMPLYING WITH THE PERMIT, PLAN AND PART 20.11.20 NMAC – FUGITIVE DUST CONTROL TO THE EXTENT SPECIFIED IN THE ABOVE [ACTIVITY(IES)] FOR THE DURATION OF THE PERMIT OR UNTIL SUCH TIME AS THE DEPARTMENT RECEIVES A REQUEST FROM THE PERMITTEE TO REMOVE YOU FROM BEING THE RESPONSIBLE PERSON FOR THE ABOVE [ACTIVITY(IES)]. THE RESPONSIBLE PERSON SHALL BE THE FIRST PERSON CONTACTED BY THE DEPARTMENT TO RESOLVE A VIOLATION OF THE PERMIT OR PART 20.11.20 NMAC TO THE EXTENT OUTLINED ABOVE IN THE ‘ACTIVE OPERATION RESPONSIBILITIES OF INDIVIDUAL SIGNING AS A RESPONSIBLE PERSON’ [ACTIVITY(IES)]. THE PERMITTEE WILL BECOME THE RESPONSIBLE PERSON FOR THE [ACTIVITY(IES)] THAT A RESPONSIBLE PERSON IS REMOVED FROM, UNLESS A NEW RESPONSIBLE PERSON IS DESIGNATED FOR THE SAME [ACTIVITY(IES)] AND APPROVED BY THE DEPARTMENT IN WRITING.**

**THE PERMITTEE OR RESPONSIBLE PERSON SHALL MAINTAIN A CURRENT COPY OF THE PERMIT AT THE WORK SITE AND MAKE THE PERMIT AVAILABLE AND EXPLAIN THE REQUIREMENTS OF THE PERMIT TO EMPLOYEES, AGENTS, CONTRACTORS, AND OTHER PERSONS PERFORMING WORK IN THE AREA TO ASSIST IN MAINTAINING COMPLIANCE WITH PART 20.11.20 NMAC – FUGITIVE DUST CONTROL.**

**PURSUANT TO THE AIR QUALITY CONTROL ACT, CHAPTER 74, ARTICLE 2 NEW MEXICO STATUTES ANNOTATED 1978, AS AMENDED; THE ALBUQUERQUE JOINT AIR QUALITY CONTROL BOARD ORDINANCE, 9-5-1-1 ROA 1994; THE BERNALILLO COUNTY JOINT AIR QUALITY CONTROL BOARD ORDINANCE, BERNALILLO COUNTY ORDINANCE 94-5, AND THE ALBUQUERQUE/BERNALILLO COUNTY AIR QUALITY CONTROL BOARD (A/BCAQCB) REGULATION TITLE 20, CHAPTER 11, PART 20, NEW MEXICO ADMINISTRATIVE CODE (NMAC), (20.11.20 NMAC) - FUGITIVE DUST CONTROL, AND UPON AUTHORIZED SIGNATURES BELOW, THIS APPLICATION TOGETHER WITH ASSOCIATED DRAWINGS, PLANS, APPENDED DOCUMENTS, OTHER DATA, AND ANY CONDITIONS ATTACHED TO THE PERMIT BY THE DEPARTMENT, WILL BECOME THE FUGITIVE DUST CONTROL CONSTRUCTION PERMIT.**

**AREA BELOW FOR DEPARTMENT USE.**

**DOES THE DEPARTMENT APPROVAL BELOW INCLUDE APPROVAL FOR ANY BULK MATERIAL STOCKPILES TO EXCEED 15 FEET \_\_\_\_\_ YES \_\_\_\_\_ NO**  
**IF YES, MAXIMUM HEIGHT ALLOWED \_\_\_\_\_ FEET**

|                          |                      |                      |            |                 |
|--------------------------|----------------------|----------------------|------------|-----------------|
| APPLICATION REVIEWED BY: | DEEMED COMPLETE DATE | PERMIT ISSUED BY:    | ISSUE DATE | EXPIRATION DATE |
| AIR QUALITY DIVISION     | / /20                | AIR QUALITY DIVISION | / /20      | / /20           |

**PART J. – TRANSFER OF FUGITIVE DUST CONTROL PERMIT AND PLAN**

**IF A PORTION OF THE REAL PROPERTY THAT IS SUBJECT TO A PERMIT IS TRANSFERRED OR SOLD, THE NEW OWNER IS RESPONSIBLE WITH OBTAINING A FUGITIVE DUST CONTROL PERMIT - UNLESS EXEMPT. THE PERMITTEE WHO TRANSFERRED OR SOLD THE REAL PROPERTY IS THEN NO LONGER RESPONSIBLE FOR FUGITIVE DUST CONTROL FROM THE REAL PROPERTY TRANSFERRED OR SOLD AND THE DEPARTMENT SHALL AMEND THE PERMIT TO REFLECT THE CHANGE.**

**USE THIS PAGE ONLY IF TRANSFERRING COMPLETE RESPONSIBILITY OF A CURRENT PERMIT AND PLAN.**

A FUGITIVE DUST CONTROL PERMIT AND PLAN MAY BE TRANSFERRED TO LEGAL HEIRS, SUCCESSORS, AND ASSIGNS, WHO SHALL BECOME THE NEW PERMITTEE. TRANSFERS MAY BE MADE AS AN ADMINISTRATIVE AMENDMENT PROVIDED THAT:

- 1) A WRITTEN TRANSFER OF AGREEMENT IS DRAFTED BETWEEN THE CURRENT AND NEW PERMITTEE, AND THE PROJECT OWNER; AND
- 2) A SPECIFIC DATE IS ESTABLISHED FOR THE TRANSFER OF THE PERMIT AND PLAN RESPONSIBILITY, COVERAGE, AND LIABILITY; AND
- 3) DEPARTMENT APPROVAL OF WRITTEN TRANSFER OF AGREEMENT HAS BEEN AUTHORIZED.

THERE IS NO COST FOR TRANSFER OF THE FUGITIVE DUST CONTROL PERMIT AND PLAN IF DETERMINED BY THE DEPARTMENT THAT ONLY ADMINISTRATIVE CHANGE IS NEEDED. HOWEVER, NEW APPLICATION INFORMATION MUST BE SUBMITTED BY THE NEW PERMITTEE OR OWNER ALONG WITH ANY APPLICABLE FEES, IF DETERMINED BY THE DEPARTMENT THAT NECESSARY CHANGES ARE REQUIRED TO COMPLETE THE TRANSFER OF AGREEMENT (PARTICULARLY, ANY INCREASE TO THE PERMITTED 'TOTAL AREA TO BE DISTURBED').

**TRANSFER OF AGREEMENT SIGNATURE BOX FOR CURRENT PERMITTEE**

\_\_\_\_\_  
PRINTED NAME OF INDIVIDUAL SIGNING FOR CURRENT PERMITTEE

\_\_\_\_\_  
REQUESTED DATE FOR TRANSFER OF PERMIT AND PLAN

\_\_\_\_\_  
SIGNATURE OF CURRENT PERMITTEE

\_\_\_\_\_  
INITIALS OF CURRENT PERMITTEE

\_\_\_\_\_  
SUBMITTAL DATE OF THIS PAGE

**TRANSFER OF AGREEMENT SIGNATURE BOX FOR NEW PERMITTEE**

\_\_\_\_\_  
PRINT NEW PERMITTEE BUSINESS NAME

\_\_\_\_\_  
REQUESTED DATE FOR ACCEPTANCE OF PERMIT AND PLAN

\_\_\_\_\_  
PRINTED NAME OF INDIVIDUAL SIGNING FOR NEW PERMITTEE

\_\_\_\_\_  
PRINT TITLE OF INDIVIDUAL SIGNING FOR NEW PERMITTEE

\_\_\_\_\_  
SIGNATURE OF NEW PERMITTEE

\_\_\_\_\_  
INITIALS OF NEW PERMITTEE

BY SIGNING ABOVE AS THE NEW PERMITTEE, I AGREE TO ACCEPT RESPONSIBILITY, COVERAGE, AND LIABILITY FOR THE EXISTING FUGITIVE DUST CONTROL PERMIT # \_\_\_\_\_ AND INCORPORATED FUGITIVE DUST CONTROL PLAN.

**TRANSFER OF AGREEMENT SIGNATURE BOX FOR PROJECT OWNER IF DIFFERENT THAN PERMITTEE**

\_\_\_\_\_  
PRINTED NAME OF INDIVIDUAL SIGNING FOR PROJECT OWNER

\_\_\_\_\_  
DATE SIGNED

\_\_\_\_\_  
SIGNATURE OF PROJECT OWNER

\_\_\_\_\_  
INITIALS OF PROJECT OWNER

BY SIGNING ABOVE AS THE PROJECT OWNER, I AGREE TO THE TRANSFER OF RESPONSIBILITY OF THE EXISTING FUGITIVE DUST CONTROL PERMIT # \_\_\_\_\_ AND INCORPORATED FUGITIVE DUST CONTROL PLAN TO THE ABOVE SIGNED NEW PERMITTEE.

**AREA BELOW FOR DEPARTMENT USE**

**INITIAL ONE OF THE CONDITIONS (A OR B) GIVEN BELOW**

A.) The department has determined that no change to the permit/plan other than administrative change is necessary \_\_\_\_\_

B.) The department has determined that necessary change(s) to the permit and/or plan are required prior to transfer \_\_\_\_\_

| PERMIT TRANSFER OF AGREEMENT<br>REVIEWED BY: | DEEMED<br>COMPLETE<br>DATE | TRANSFERRED PERMIT<br># _____ ISSUED BY: | ISSUE DATE     | EXPIRATION<br>DATE |
|--|----------------------------|--|----------------|--------------------|
| _____<br>AIR QUALITY DIVISION                | _____/_____/20             | _____<br>AIR QUALITY DIVISION            | _____/_____/20 | _____/_____/20     |

## **Appendix B**

# **Correspondence and Consultation**



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## Tribal Correspondence

The following letter and attachment were sent to the tribes listed below (per email from Valerie Renner below):

- Comanche
- Acoma
- Cochiti,
- Hopi
- Isleta
- Jemez
- Jicarilla
- Laguna
- Mescalero Apache
- Nambe
- Navajo
- Ohkay Owingeh
- Picuris
- Pojoaque
- San Felipe
- San Ildefonso
- Sandia
- Santa Ana
- Santa Clara
- Santo Domingo
- Taos
- Tesuque
- White Mt Apache
- Ysleta del Sur
- Zia
- Zuni.

---

From: Renner, Valerie A Civ USAF AFMC 377 MSG/CEANQ  
Sent: Monday, May 10, 2010 10:55 AM  
To: Adkins, Joshua S Civ USAF AFMC 377 MSG/CEANQ  
Subject: AAFES

Josh here is the letter we sent and I am looking for the one we received from the SHPO.

Thanks

Valerie

I sent the letters to: Comanche, Acoma, Cochiti, Hopi, Isleta, Jemez, Jicarilla, Laguna, Mescalero Apache, Nambe, Navajo, Ohkay Owingeh, Picuris, Pojoaque, San Felipe, San Ildefonso, Sandia, Santa Ana, Santa Clara, Santo Domingo, Taos, Tesuque, White Mt Apache, Ysleta del Sur, Zia, Zuni.

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DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS 377TH AIR BASE WING (AFMC)

Colonel Michael S. Duvall  
377 ABW/CC  
2000 Wyoming Blvd SE  
Kirtland AFB NM 87117-5000

Pueblo of Jemez  
Governor David Toledo  
P.O. Box 100  
Jemez Pueblo NM 87024

Dear Governor Toledo

To improve our government-to-government relationship with your tribe, we would like to develop a program with you to review current and future activities associated with the mission of Kirtland Air Force Base (Kirtland AFB). Our broad mission is to ensure safe, secure and reliable weapons systems to support the national command structure and the Air Force warfighter. Our responsibilities are to advocate the Air Force's weapon system and support programs. In order to achieve this mission Kirtland AFB is constantly changing and growing.

We have seven projects currently under planning and potentially of interest to your tribe. A list of these projects is attached. If you have potential interest or concerns related to these projects, please contact Ms. Valerie Renner at telephone number (505) 846-8840.

As a follow-up to this letter, Ms. Renner will be calling you to further discuss Kirtland AFB's intent to improve our consultation process and to determine if you wish to discuss any of the projects identified on the attached list. If you would like to personally meet with me to discuss these or other topics, please advise Ms. Renner and she will facilitate a meeting. Thank you for your time in consideration of our requests.

Sincerely

MICHAEL S. DUVALL, Col, USAF  
Commander

Attachment:

1. Description of Proposed Actions at Kirtland AFB

This page left blank intentionally.

### **HC/MC-130 Aircraft Recapitalization:**

The 58th Special Operations Wing (58th SOW) proposes to get 12 new C-130 airplanes to replace 8 older ones they currently fly. No change in the mission of the 58th SOW will occur. The number of people that will come here to train will increase slightly.

### **Heavy Weapons Range:**

The 377th Air Base Wing is proposing to establish and use a heavy weapons range in the southeast section of Kirtland AFB approximately 0.25 miles east of the Starfire Optical Range facilities along Mount Washington Road. The proposed range will encompass the existing M60 range. It would include two firing positions and firing lines and would use the existing targets at the M60 range. Firing distance would be approximately 7,300 feet. Firing position two would be used for sniper heavy weapons (.50 caliber) and would fire in a more southerly direction to the existing target area, approximately 3,800 feet.

### **Construct New Hot Cargo Pad:**

Kirtland AFB has only one hot cargo pad that aircraft park on to load and unload supplies that are continuously flown in and out of Kirtland AFB. The new pad will consist of a cement concrete containing additives to reduce the effects of alkali-silica reactivity. The new pad will adjoin the existing. This project will include a new 6" asphalt taxiway and replace the deteriorated asphalt taxiway to Pad 5. The new pad will adjoin the existing Pad 5 to minimize enlargement of the clear zone and effects on other critical facilities.

### **Dormitory Master Plan:**

This project proposes to construct three new permanent party dormitories to replace old substandard dormitories built in 1950. Kirtland AFB currently has a surplus of old substandard dormitory space this project will help eliminate. The proposed dormitories will be energy-efficient and more economical to maintain.

### **Construct New Shopping Center:**

The Army and Air Force Exchange Service (AAFES) proposes to construct and operate a new Shopping Center at Kirtland AFB. This proposed project will include demolishing of existing facilities, closure of Pennsylvania Avenue, and the construction of a new road behind the new shopping center.

### **Construct Several New Facilities:**

Kirtland AFB proposes to construct six new facilities that will support the fire department (two new fire stations), the newly formed 498th Nuclear System Wing, the newly formed Air Force Nuclear Weapons Center Sustainment Center, the Military Working Dog Facility, and a new Fitness Center. All of these proposed actions will be described in detail in separate Environmental Assessments for review.

### **Excavation of Five Archaeology Sites:**

Kirtland AFB Cultural Resource Manager is developing a research design to excavate five archaeological sites (LA 155815, LA 156001, LA 107494, LA 53671, and LA 153888). Two of the sites (LA 155815 and LA 156001) are next to each other just south of Tijeras Arroyo. They have been exposed due to past flooding of the arroyo and are now eroding from wind and natural elements. The sites are dated as Classic Pueblo from AD 1625 – 1700. This is in the beginning stages of design and the exact procedure has not been determined.

LA 107494 had been damaged by a bulldozer and the cuts have exposed several features. It is a large habitation area with several structures dating from Late Developmental to Coalition (1050 – 1600 AD) time periods. The site is slowly being destroyed by this erosion. Therefore, we recommend stabilizing the site.

LA 53671 is a potentially extensive pithouse village dating to the Late Developmental to Early Classic period (AD 1050 – 1325). This site appears to have been damaged by a large bulldozer. We are estimating this happened during the construction of Coyote Springs Road. Several large trenches exist throughout the site and erosion of the site has been exacerbated by the trenches. The site is slowly being destroyed by this erosion. Therefore, we recommend stabilizing the site.

LA 153888 is a large biface cache. This site is also being damaged by erosion that is caused by a road that was put in near the site. We recommend stabilizing the site.



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS 377TH AIR BASE WING (AFMC)

NOV 9 2009

Colonel Michael S. Duvall  
377 ABW/CC  
2000 Wyoming Blvd SE  
Kirtland AFB NM 87117-5606

Ms. Jan Biella  
Acting State Historic Preservation Officer  
Department of Cultural Affairs  
Historic Preservation Division  
Bataan Memorial Building  
407 Galisteo Street, Suite 236  
Santa Fe NM 87501

Dear Ms. Biella

Kirtland Air Force Base (KAFB) is proposing to develop a new Army Air Force Exchange Service (AAFES) Shopping Center on the installation. The center will include retail shopping space, a merchandise processing area, and a Food/Concession Mall. The project will include demolition of the existing satellite pharmacy (Building 20167) built in 1997, closure of a portion of Pennsylvania Street, and construction of a new road behind the new AAFES center (see Attachment 1). The proposed action will not impact any historic properties. If cultural resources are encountered during the excavation, all activities will stop and the prescribed actions of the National Historic Preservation Act, as amended 1966, will be implemented.

We appreciate your review of this proposed action and will assume your concurrence that there is no adverse effect to historic properties if we receive no reply within 30 days. If you have any questions or require further information, please contact Ms. Valerie Renner, Cultural Resources Program Manager, at (505) 846-8840.

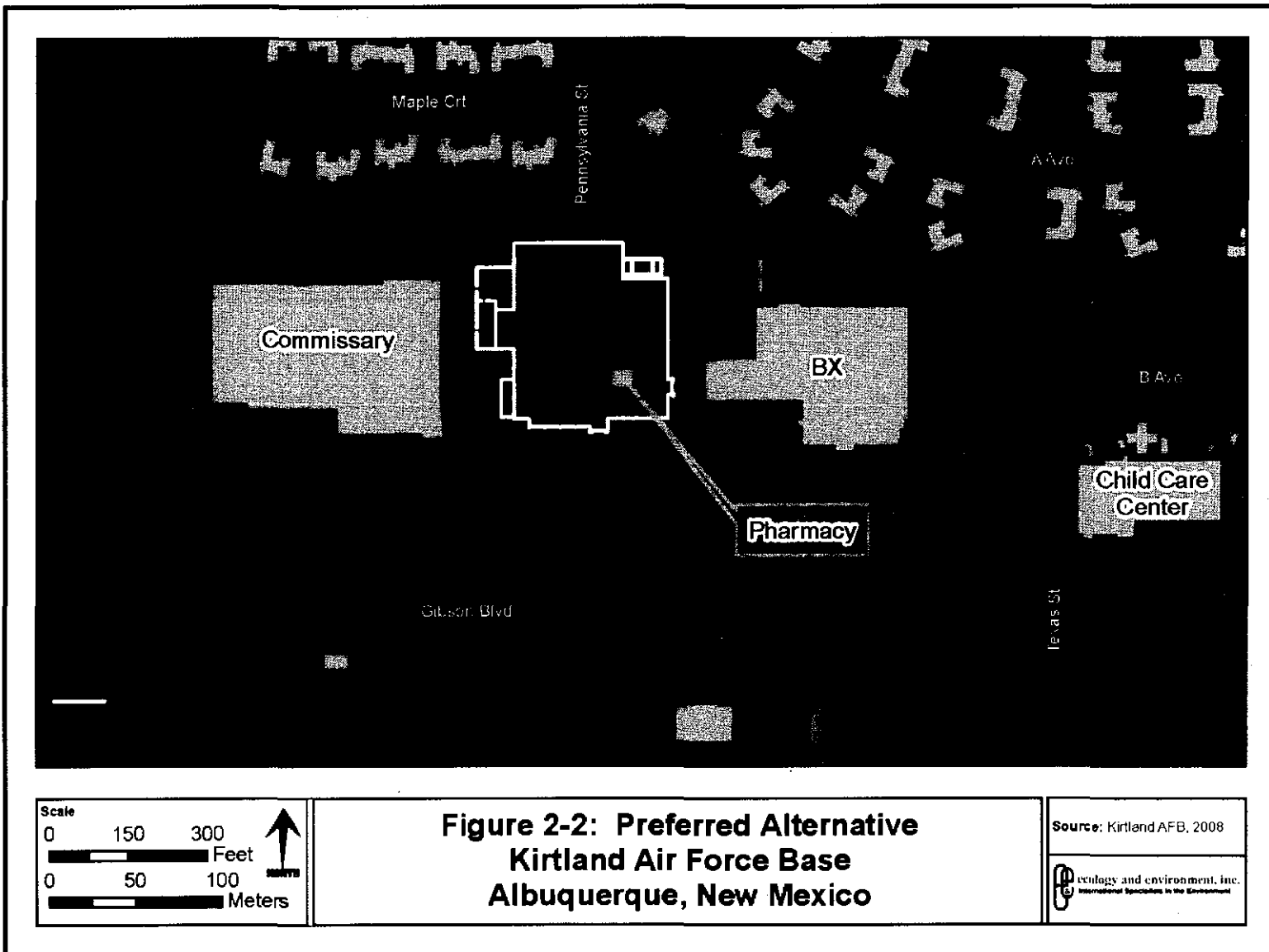
Sincerely

MICHAEL S. DUVALL, Colonel, USAF  
Commander

Attachment:  
Map of Proposed Action



© Ecology & Environment, Inc. GIS Department Project #002858.es20  
Y:\2001-3000\2858\_Kirtland\NewKit\FDM\fig2\_2landscape.mxd 07/30/2009



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**From:** Adkins, Joshua S Civ USAF AFMC 377 MSG/CEANQ [Joshua.Adkins@kirtland.af.mil]  
**Sent:** Tuesday, July 20, 2010 5:15 PM  
**To:** bagallegos@cabq.gov; itavarez@cabq.gov  
**Cc:** Duggar, Kelly  
**Subject:** Environmental Assessment (EA) addressing construction and operation of a Shopping Center at Kirtland Air Force Base (KAFB)  
**Signed By:** There are problems with the signature. Click the signature button for details.  
**Attachments:** CoA IICEP Letter.pdf

Hello,

The Army and Air Force Exchange Service (AAFES) has prepared a Draft Environmental Assessment (EA) addressing construction and operation of a Shopping Center at Kirtland Air Force Base (KAFB). AAFES proposes to construct and operate a new 95,421-square-foot Shopping Center on a portion of Pennsylvania Street between the existing Commissary and the existing Base Exchange (BX). The purpose of the action is to better serve the needs of the military community through the consolidation of shopping and other services by replacing the existing aged and obsolete BX and Mini-Mall facilities with one new consolidated facility. The environmental impact analysis process for this proposal is being conducted in accordance with Council on Environmental Quality regulations pursuant to the National Environmental Policy Act (NEPA) of 1969. A letter requesting your review of this action has been attached.

Thank you,  
Joshua Adkins  
NEPA Program Manager  
505-846-7084  
DSN 246-7084



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS, 377TH AIR BASE WING (AFMC)

JUL 19 2010

Colonel Robert L. Maness  
377ABW/CC  
2000 Wyoming Blvd SE Suite E-3  
Kirtland AFB NM 87117-5000

Ms. Mary Lou Leonard  
City of Albuquerque  
Acting Environmental Health Department Director  
PO Box 1293  
Albuquerque NM 87103

Re: Construction and Operation of a Shopping Center at Kirtland Air Force Base

Dear Ms. Leonard

The Army and Air Force Exchange Service (AAFES) has prepared a Draft Environmental Assessment (EA) addressing construction and operation of a Shopping Center at Kirtland Air Force Base (KAFB). AAFES proposes to construct and operate a new 95,421-square-foot Shopping Center on a portion of Pennsylvania Street between the existing Commissary and the existing Base Exchange (BX). The purpose of the action is to better serve the needs of the military community through the consolidation of shopping and other services by replacing the existing aged and obsolete BX and Mini-Mall facilities with one new consolidated facility. The environmental impact analysis process for this proposal is being conducted in accordance with Council on Environmental Quality regulations pursuant to the National Environmental Policy Act (NEPA) of 1969.

In accordance with Executive Order 12372, Intergovernmental Review of Federal Programs, I request your participation by reviewing the Draft EA and solicit your comments concerning the proposal and any potential environmental concerns you may have. Copies of the Draft EA and the proposed Finding of No Significant Impact are available at <http://www.kirtland.af.mil> under the environmental issues tab. Please provide written comments on the Draft EA or other information regarding the action at your earliest convenience but no later than 30 days from the receipt of this letter. Appendix B of the Draft EA contains a listing of those Federal, state, and local agencies that have been contacted. If there are any additional agencies that you feel should review and comment on the proposed activities, please include them in your distribution of this letter.

Please address questions or comments on this proposed action to the NEPA Program Manager, 377 MSG/CEANQ, 2050 Wyoming Boulevard SE, Suite 125, KAFB, NM 87117, or via email to [nepa@kirtland.af.mil](mailto:nepa@kirtland.af.mil).

Sincerely

A handwritten signature in blue ink, reading "Robert L. Maness", is positioned above the printed name.

ROBERT L. MANESS, Colonel, USAF  
Commander

---

**From:** Adkins, Joshua S Civ USAF AFMC 377 MSG/CEANQ [Joshua.Adkins@kirtland.af.mil]  
**Sent:** Tuesday, July 20, 2010 5:24 PM  
**To:** Georgia.cleverley@state.nm.us  
**Cc:** Duggar, Kelly  
**Subject:** Environmental Assessment (EA) addressing construction and operation of a Shopping Center at Kirtland Air Force Base (KAFB).  
**Signed By:** There are problems with the signature. Click the signature button for details.  
**Attachments:** NMED IICEP Letter.pdf

Hello,

The Army and Air Force Exchange Service (AAFES) has prepared a Draft Environmental Assessment (EA) addressing construction and operation of a Shopping Center at Kirtland Air Force Base (KAFB). AAFES proposes to construct and operate a new 95,421-square-foot Shopping Center on a portion of Pennsylvania Street between the existing Commissary and the existing Base Exchange (BX). The purpose of the action is to better serve the needs of the military community through the consolidation of shopping and other services by replacing the existing aged and obsolete BX and Mini-Mall facilities with one new consolidated facility. The environmental impact analysis process for this proposal is being conducted in accordance with Council on Environmental Quality regulations pursuant to the National Environmental Policy Act (NEPA) of 1969. A letter requesting your review of this action has been attached.

Thank you,  
Joshua Adkins  
NEPA Program Manager  
505-846-7084  
DSN 246-7084





DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS, 377TH AIR BASE WING (AFMC)

JUL 19 2010

Colonel Robert L. Maness  
377ABW/CC  
2000 Wyoming Blvd SE Suite E-3  
Kirtland AFB NM 87117-5000

Ms. Georgia Cleverley  
New Mexico Environment Department  
Office of Planning and Performance  
PO Box 5469  
Santa Fe NM 87502-5469

Re: Construction and Operation of a Shopping Center at Kirtland Air Force Base

Dear Ms. Cleverley

The Army and Air Force Exchange Service (AAFES) has prepared a Draft Environmental Assessment (EA) addressing construction and operation of a Shopping Center at Kirtland Air Force Base (KAFB). AAFES proposes to construct and operate a new 95,421-square-foot Shopping Center on a portion of Pennsylvania Street between the existing Commissary and the existing Base Exchange (BX). The purpose of the action is to better serve the needs of the military community through the consolidation of shopping and other services by replacing the existing aged and obsolete BX and Mini-Mall facilities with one new consolidated facility. The environmental impact analysis process for this proposal is being conducted in accordance with Council on Environmental Quality regulations pursuant to the National Environmental Policy Act (NEPA) of 1969.

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Please address questions or comments on this proposed action to the NEPA Program Manager, 377 MSG/CEANQ, 2050 Wyoming Boulevard SE, Suite 125, KAFB, NM 87117, or via email to [nepa@kirtland.af.mil](mailto:nepa@kirtland.af.mil).

Sincerely

A handwritten signature in blue ink, reading "Robert L. Maness", is positioned above the printed name and title.

ROBERT L. MANESS, Colonel, USAF  
Commander

---

**From:** Adkins, Joshua S Civ USAF AFMC 377 MSG/CEANQ [Joshua.Adkins@kirtland.af.mil]  
**Sent:** Tuesday, July 20, 2010 5:25 PM  
**To:** Terra.manasco@state.nm.us  
**Cc:** Duggar, Kelly  
**Subject:** Environmental Assessment (EA) addressing construction and operation of a Shopping Center at Kirtland Air Force Base (KAFB)  
**Signed By:** There are problems with the signature. Click the signature button for details.  
**Attachments:** NMGF IICEP Letter.pdf

Hello,

The Army and Air Force Exchange Service (AAFES) has prepared a Draft Environmental Assessment (EA) addressing construction and operation of a Shopping Center at Kirtland Air Force Base (KAFB). AAFES proposes to construct and operate a new 95,421-square-foot Shopping Center on a portion of Pennsylvania Street between the existing Commissary and the existing Base Exchange (BX). The purpose of the action is to better serve the needs of the military community through the consolidation of shopping and other services by replacing the existing aged and obsolete BX and Mini-Mall facilities with one new consolidated facility. The environmental impact analysis process for this proposal is being conducted in accordance with Council on Environmental Quality regulations pursuant to the National Environmental Policy Act (NEPA) of 1969. A letter requesting your review of this action has been attached.

Thank you,  
Joshua Adkins  
NEPA Program Manager  
505-846-7084  
DSN 246-7084



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS, 377TH AIR BASE WING (AFMC)

JUL 19 2010

Colonel Robert L. Maness  
377ABW/CC  
2000 Wyoming Blvd SE Suite E-3  
Kirtland AFB NM 87117-5000

Ms. Terra Monasco  
New Mexico Game and Fish  
Assistant Chief of Conservation Services Division  
PO Box 25112  
Santa Fe NM 87504

Re: Construction and Operation of a Shopping Center at Kirtland Air Force Base

Dear Ms. Monasco

The Army and Air Force Exchange Service (AAFES) has prepared a Draft Environmental Assessment (EA) addressing construction and operation of a Shopping Center at Kirtland Air Force Base (KAFB). AAFES proposes to construct and operate a new 95,421-square-foot Shopping Center on a portion of Pennsylvania Street between the existing Commissary and the existing Base Exchange (BX). The purpose of the action is to better serve the needs of the military community through the consolidation of shopping and other services by replacing the existing aged and obsolete BX and Mini-Mall facilities with one new consolidated facility. The environmental impact analysis process for this proposal is being conducted in accordance with Council on Environmental Quality regulations pursuant to the National Environmental Policy Act (NEPA) of 1969.

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Please address questions or comments on this proposed action to the NEPA Program Manager, 377 MSG/CEANQ, 2050 Wyoming Boulevard SE, Suite 125, KAFB, NM 87117, or via email to [nepa@kirtland.af.mil](mailto:nepa@kirtland.af.mil).

Sincerely

A handwritten signature in blue ink, reading "Robert L. Maness", is positioned above the printed name.

ROBERT L. MANESS, Colonel, USAF  
Commander



---

**From:** Adkins, Joshua S Civ USAF AFMC 377 MSG/CEANQ [Joshua.Adkins@kirtland.af.mil]  
**Sent:** Tuesday, July 20, 2010 5:29 PM  
**To:** tswisstack@ci.rio-rancho.nm.us  
**Cc:** Duggar, Kelly  
**Subject:** Environmental Assessment (EA) addressing construction and operation of a Shopping Center at Kirtland Air Force Base (KAFB)  
**Signed By:** There are problems with the signature. Click the signature button for details.  
**Attachments:** Rio Rancho IICEP Letter.pdf

Sir,

The Army and Air Force Exchange Service (AAFES) has prepared a Draft Environmental Assessment (EA) addressing construction and operation of a Shopping Center at Kirtland Air Force Base (KAFB). AAFES proposes to construct and operate a new 95,421-square-foot Shopping Center on a portion of Pennsylvania Street between the existing Commissary and the existing Base Exchange (BX). The purpose of the action is to better serve the needs of the military community through the consolidation of shopping and other services by replacing the existing aged and obsolete BX and Mini-Mall facilities with one new consolidated facility. The environmental impact analysis process for this proposal is being conducted in accordance with Council on Environmental Quality regulations pursuant to the National Environmental Policy Act (NEPA) of 1969. A letter requesting your review of this action has been attached.

Thank you,  
Joshua Adkins  
NEPA Program Manager  
505-846-7084  
DSN 246-7084

9/1/2010





DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS, 377TH AIR BASE WING (AFMC)

JUL 19 2010

Colonel Robert L. Maness  
377ABW/CC  
2000 Wyoming Blvd SE Suite E-3  
Kirtland AFB NM 87117-5000

The Honorable Thomas E. Swisstack  
Mayor of Rio Rancho  
Civic Center  
3200 Civic Center Circle NE  
Rio Rancho NM 87144

Re: Construction and Operation of a Shopping Center at Kirtland Air Force Base

Dear Mayor Swisstack

The Army and Air Force Exchange Service (AAFES) has prepared a Draft Environmental Assessment (EA) addressing construction and operation of a Shopping Center at Kirtland Air Force Base (KAFB). AAFES proposes to construct and operate a new 95,421-square-foot Shopping Center on a portion of Pennsylvania Street between the existing Commissary and the existing Base Exchange (BX). The purpose of the action is to better serve the needs of the military community through the consolidation of shopping and other services by replacing the existing aged and obsolete BX and Mini-Mall facilities with one new consolidated facility. The environmental impact analysis process for this proposal is being conducted in accordance with Council on Environmental Quality regulations pursuant to the National Environmental Policy Act (NEPA) of 1969.

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Please address questions or comments on this proposed action to the NEPA Program Manager, 377 MSG/CEANQ, 2050 Wyoming Boulevard SE, Suite 125, KAFB, NM 87117, or via email to [nepa@kirtland.af.mil](mailto:nepa@kirtland.af.mil).

Sincerely

  
ROBERT L. MANESS, Colonel, USAF  
Commander

---

**From:** Adkins, Joshua S Civ USAF AFMC 377 MSG/CEANQ [Joshua.Adkins@kirtland.af.mil]  
**Sent:** Tuesday, July 20, 2010 5:37 PM  
**To:** julie.a.alcon@usace.army.mil  
**Cc:** Duggar, Kelly  
**Subject:** Environmental Assessment (EA) addressing construction and operation of a Shopping Center at Kirtland Air Force Base (KAFB)  
**Signed By:** There are problems with the signature. Click the signature button for details.  
**Attachments:** USACE IICEP Letter.pdf

Hello,

The Army and Air Force Exchange Service (AAFES) has prepared a Draft Environmental Assessment (EA) addressing construction and operation of a Shopping Center at Kirtland Air Force Base (KAFB). AAFES proposes to construct and operate a new 95,421-square-foot Shopping Center on a portion of Pennsylvania Street between the existing Commissary and the existing Base Exchange (BX). The purpose of the action is to better serve the needs of the military community through the consolidation of shopping and other services by replacing the existing aged and obsolete BX and Mini-Mall facilities with one new consolidated facility. The environmental impact analysis process for this proposal is being conducted in accordance with Council on Environmental Quality regulations pursuant to the National Environmental Policy Act (NEPA) of 1969. A letter requesting your review of this action has been attached.

Thank you,  
Joshua Adkins  
NEPA Program Manager  
505-846-7084  
DSN 246-7084



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS, 377TH AIR BASE WING (AFMC)

JUL 19 2010

Colonel Robert L. Maness  
377ABW/CC  
2000 Wyoming Blvd SE Suite E-3  
Kirtland AFB NM 87117-5000

Ms. Julie Alcon  
U.S. Army Corps of Engineers  
Chief of Environmental Resources Section  
4101 Jefferson Plaza NE  
Albuquerque NM 87109

Re: Construction and Operation of a Shopping Center at Kirtland Air Force Base

Dear Ms. Alcon

The Army and Air Force Exchange Service (AAFES) has prepared a Draft Environmental Assessment (EA) addressing construction and operation of a Shopping Center at Kirtland Air Force Base (KAFB). AAFES proposes to construct and operate a new 95,421-square-foot Shopping Center on a portion of Pennsylvania Street between the existing Commissary and the existing Base Exchange (BX). The purpose of the action is to better serve the needs of the military community through the consolidation of shopping and other services by replacing the existing aged and obsolete BX and Mini-Mall facilities with one new consolidated facility. The environmental impact analysis process for this proposal is being conducted in accordance with Council on Environmental Quality regulations pursuant to the National Environmental Policy Act (NEPA) of 1969.

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Sincerely

  
ROBERT L. MANESS, Colonel, USAF  
Commander



---

**From:** Adkins, Joshua S Civ USAF AFMC 377 MSG/CEANQ [Joshua.Adkins@kirtland.af.mil]  
**Sent:** Tuesday, July 20, 2010 6:36 PM  
**To:** ggranger@Fs.fed.us  
**Cc:** Duggar, Kelly  
**Subject:** Environmental Assessment (EA) addressing construction and operation of a Shopping Center at Kirtland Air Force Base (KAFB)  
**Signed By:** There are problems with the signature. Click the signature button for details.  
**Attachments:** USFS IICEP Letter.pdf

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Thank you,  
Joshua Adkins  
NEPA Program Manager  
505-846-7084  
DSN 246-7084



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS, 377TH AIR BASE WING (AFMC)

JUL 19 2010

Colonel Robert L. Maness  
377ABW/CC  
2000 Wyoming Blvd SE Suite E-3  
Kirtland AFB NM 87117-5000

Ms. Jackie Andrew  
Southwestern Region NEPA Coordinator  
U.S. Forest Service  
333 Broadway Blvd. SE,  
Albuquerque NM 87102

Re: Construction and Operation of a Shopping Center at Kirtland Air Force Base

Dear Ms. Andrew

The Army and Air Force Exchange Service (AAFES) has prepared a Draft Environmental Assessment (EA) addressing construction and operation of a Shopping Center at Kirtland Air Force Base (KAFB). AAFES proposes to construct and operate a new 95,421-square-foot Shopping Center on a portion of Pennsylvania Street between the existing Commissary and the existing Base Exchange (BX). The purpose of the action is to better serve the needs of the military community through the consolidation of shopping and other services by replacing the existing aged and obsolete BX and Mini-Mall facilities with one new consolidated facility. The environmental impact analysis process for this proposal is being conducted in accordance with Council on Environmental Quality regulations pursuant to the National Environmental Policy Act (NEPA) of 1969.

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Sincerely

ROBERT L. MANESS, Colonel, USAF  
Commander

---

**From:** Adkins, Joshua S Civ USAF AFMC 377 MSG/CEANQ [Joshua.Adkins@kirtland.af.mil]  
**Sent:** Tuesday, July 20, 2010 6:42 PM  
**To:** Rob\_Campellone@fws.gov  
**Cc:** Duggar, Kelly  
**Subject:** Environmental Assessment (EA) addressing construction and operation of a Shopping Center at Kirtland Air Force Base (KAFB)  
**Signed By:** There are problems with the signature. Click the signature button for details.  
**Attachments:** USFWS IICEP Letter.pdf



USFWS IICEP  
Letter.pdf

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Thank you,  
Joshua Adkins  
NEPA Program Manager  
505-846-7084  
DSN 246-7084





DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS, 377TH AIR BASE WING (AFMC)

JUL 19 2010

Colonel Robert L. Maness  
377ABW/CC  
2000 Wyoming Blvd SE Suite E-3  
Kirtland AFB NM 87117-5000

Mr. Robert Campellone  
U.S. Fish and Wildlife Service  
Division of Planning  
PO Box 1306  
Albuquerque NM 87103

Re: Construction and Operation of a Shopping Center at Kirtland Air Force Base

Dear Mr. Campellone

The Army and Air Force Exchange Service (AAFES) has prepared a Draft Environmental Assessment (EA) addressing construction and operation of a Shopping Center at Kirtland Air Force Base (KAFB). AAFES proposes to construct and operate a new 95,421-square-foot Shopping Center on a portion of Pennsylvania Street between the existing Commissary and the existing Base Exchange (BX). The purpose of the action is to better serve the needs of the military community through the consolidation of shopping and other services by replacing the existing aged and obsolete BX and Mini-Mall facilities with one new consolidated facility. The environmental impact analysis process for this proposal is being conducted in accordance with Council on Environmental Quality regulations pursuant to the National Environmental Policy Act (NEPA) of 1969.

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Sincerely

A handwritten signature in blue ink, appearing to read "Robert L. Maness", is positioned above the typed name.

ROBERT L. MANESS, Colonel, USAF  
Commander



United States  
Department of  
Agriculture

Forest  
Service

Cibola National Forest and  
National Grasslands

2113 Osuna Road NE  
Albuquerque, NM 87113-1001  
(505) 346-3900 FAX: 346-3901

File Code: 1950-1

Date: July 26, 2010

Joshua Adkins, NEPA Program Manager  
377 MSG/CEANQ  
2050 Wyoming Boulevard SE, Suite 125  
KAFB, NM 87117

Dear Mr. Adkins:

The Southwestern Regional Office forwarded your request for comments on the proposal to construct a new shopping center on KAFB to my office for review. After reviewing the description of the proposal, the location of the proposed action and alternatives, and the effects documented in the Environmental Assessment, I have determined that the project would not affect resources on the Cibola National Forest.

Therefore, we have no environmental concerns related to the proposal and this office has no further comment on the EA.

Sincerely,

FOR

NANCY ROSE  
Forest Supervisor





GOVERNOR  
Bill Richardson



DIRECTOR AND SECRETARY  
TO THE COMMISSION  
Tod Stevenson

Robert S. Jenks, Deputy Director

## STATE OF NEW MEXICO DEPARTMENT OF GAME & FISH

One Wildlife Way  
Post Office Box 25112  
Santa Fe, NM 87504  
Phone: (505) 476-8101  
Fax: (505) 476-8128

Visit our website at [www.wildlife.state.nm.us](http://www.wildlife.state.nm.us)  
For information call: 505/476-8000  
To order free publications call: 1-800-862-9310

### STATE GAME COMMISSION

JIM McCLINTIC, Chairman  
Albuquerque, NM

SANDY BUFFETT, Vice-Chairwoman  
Santa Fe, NM

DR. TOM ARVAS, Commissioner  
Albuquerque, NM

GARY W. FONAY, Commissioner  
Hobbs, NM

KENT A. SALAZAR, Commissioner  
Albuquerque, NM

M.H. "DUTCH" SALMON, Commissioner  
Silver City, NM

THOMAS "DICK" SALOPEK, Commissioner  
Las Cruces, NM

2 August 2010

NEPA Program Manager  
377 MSG/CEANQ  
2050 Wyoming BLVD SE, Suite 125  
Kirtland Air Force Base, NM 87117

Re: Construction and Operation of a Shopping Center at Kirtland Air Force Base; NMDGF No.13476

Dear NEPA Program Manager,

In response to your letter dated 19 July 2010, regarding the above referenced project the Department of Game and Fish (Department) does not anticipate significant impacts to wildlife or sensitive habitats. For your information, we have enclosed a list of sensitive, threatened and endangered species that occur in Bernalillo County.

For more information on listed and other species of concern, contact the following sources:

1. BISON-M Species Accounts, Searches, and County lists: <http://www.bison-m.org>
2. Habitat Handbook Project Guidelines:  
[http://wildlife.state.nm.us/conservation/habitat\\_handbook/index.htm](http://wildlife.state.nm.us/conservation/habitat_handbook/index.htm)
3. For custom, site-specific database searches on plants and wildlife, go to <http://nhnm.unm.edu>, then go to Data, then to Free On-Line Data, and follow the directions
4. New Mexico State Forestry Division (505-476-3334) or <http://nmrareplants.unm.edu/index.html> for state-listed plants
5. For the most current listing of federally listed species **always** check the U.S. Fish and Wildlife Service at (505-346-2525) or <http://www.fws.gov/southwest/es/NewMexico/SBC.cfm>.

Thank you for the opportunity to review and comment on your project. If you have any questions, please contact Mark Watson at 505.476.8115 or [mark.watson@state.nm.us](mailto:mark.watson@state.nm.us).

Sincerely,

Terra Manasco  
Assistant Chief, Conservation Services Division  
Technical Guidance Section

TLM/mw

xc: Wally Murphy, Ecological Services Field Supervisor, USFWS  
Brian Gleadle, NW Area Operations Chief, NMDGF

# NEW MEXICO WILDLIFE OF CONCERN

## BERNALILLO COUNTY

For complete up-dated information on federal-listed species, including plants, see the US Fish & Wildlife Service NM Ecological Services Field Office website at <http://www.fws.gov/ifw2es/NewMexico/SBC.cfm>. For information on state-listed plants, contact the NM Energy, Minerals and Natural Resources Department, Division of Forestry, or go to <http://nmrareplants.unm.edu/>. If your project is on Bureau of Land Management, contact the local BLM Field Office for information on species of particular concern. If your project is on a National Forest, contact the Forest Supervisor's office for species information.

| <u>Common Name</u>              | <u>Scientific Name</u>                    | <u>NMGF</u> | <u>US FWS</u> | <u>critical habitat</u> |
|---------------------------------|---|-------------|---------------|-------------------------|
| Rio Grande Chub                 | <i>Gila pandora</i>                       | s           |               |                         |
| Rio Grande Silvery Minnow       | <i>Hybognathus amarus</i>                 | E           | E             | Y                       |
| Brown Pelican                   | <i>Pelecanus occidentalis</i>             | E           |               |                         |
| Neotropic Cormorant             | <i>Phalacrocorax brasilianus</i>          | T           |               |                         |
| Bald Eagle                      | <i>Haliaeetus leucocephalus</i>           | T           | T             |                         |
| Northern Goshawk                | <i>Accipiter gentilis</i>                 | s           | SOC           |                         |
| Common Black-Hawk               | <i>Buteogallus anthracinus</i>            | T           | SOC           |                         |
| Aplomado Falcon                 | <i>Falco femoralis</i>                    | E           | Exp           |                         |
| Peregrine Falcon                | <i>Falco peregrinus</i>                   | T           | SOC           |                         |
| Mountain Plover                 | <i>Charadrius montanus</i>                | s           | SOC           |                         |
| Black Tern                      | <i>Chlidonias niger surinamensis</i>      |             | SOC           |                         |
| Yellow-billed Cuckoo            | <i>Coccyzus americanus</i>                | s           | C             |                         |
| Mexican Spotted Owl             | <i>Strix occidentalis lucida</i>          | s           | T             | Y                       |
| Burrowing Owl                   | <i>Athene cunicularia</i>                 |             | SOC           |                         |
| Black Swift                     | <i>Cypseloides niger</i>                  | s           |               |                         |
| Broad-billed Hummingbird        | <i>Cynanthus latirostris</i>              | T           |               |                         |
| White-eared Hummingbird         | <i>Hylocharis leucotis</i>                | T           |               |                         |
| Southwestern Willow Flycatcher  | <i>Empidonax traillii extimus</i>         | E           | E             | Y                       |
| Loggerhead Shrike               | <i>Lanius ludovicianus</i>                | s           |               |                         |
| Bell's Vireo                    | <i>Vireo bellii</i>                       | T           | SOC           |                         |
| Gray Vireo                      | <i>Vireo vicinior</i>                     | T           |               |                         |
| Baird's Sparrow                 | <i>Ammodramus bairdii</i>                 | T           | SOC           |                         |
| Western Small-footed Myotis Bat | <i>Myotis ciliolabrum melanorhinus</i>    | s           |               |                         |
| Yuma Myotis Bat                 | <i>Myotis yumanensis yumanensis</i>       | s           |               |                         |
| Occult Little Brown Myotis Bat  | <i>Myotis lucifugus occultus</i>          | s           |               |                         |
| Long-legged Myotis Bat          | <i>Myotis volans interior</i>             | s           |               |                         |
| Fringed Myotis Bat              | <i>Myotis thysanodes thysanodes</i>       | s           |               |                         |
| Spotted Bat                     | <i>Euderma maculatum</i>                  | T           |               |                         |
| Pale Townsend's Big-eared Bat   | <i>Corynorhinus townsendii pallescens</i> | s           | SOC           |                         |
| Big Free-tailed Bat             | <i>Nyctinomops macrotis</i>               | s           |               |                         |
| Gunnison's Prairie Dog          | <i>Cynomys gunnisoni</i>                  | s           |               |                         |
| New Mexican Jumping Mouse       | <i>Zapus hudsonius luteus</i>             | E           | SOC           |                         |
| Red Fox                         | <i>Vulpes vulpes</i>                      | s           |               |                         |
| Ringtail                        | <i>Bassariscus astutus</i>                | s           |               |                         |
| Black-footed Ferret             | <i>Mustela nigripes</i>                   |             | E             |                         |
| Western Spotted Skunk           | <i>Spilogale gracilis</i>                 | s           |               |                         |
| Socorro Mountainsnail           | <i>Oreohelix neomexicana</i>              | s           |               |                         |
| Slate Millipede                 | <i>Comanachelus chihuensis</i>            |             | SOC           |                         |

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**Appendix C**

**Notice of Intent (NOI) for  
Stormwater Discharges Associated  
with Construction Activity under an  
NPDES General Permit  
and  
Notice of Termination (NOT)  
of Coverage**

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NPDES  
FORM



United States Environmental Protection Agency  
Washington, DC 20460  
**Notice of Termination (NOT) of Coverage Under an NPDES General Permit for  
Stormwater Discharges Associated with Construction Activity**

Submission of this Notice of Termination constitutes notice that the party identified in Section II of this form is no longer authorized to discharge stormwater associated with construction activity under the NPDES program from the site identified in Section III of this form. All necessary information must be included on this form. Refer to the instructions at the end of this form.

**I. Permit Information**

NPDES Stormwater General Permit Tracking Number:

Reason for Termination (Check only one):

- ☐ Final stabilization has been achieved on all portions of the site for which you are responsible.
- ☐ Another operator has assumed control, according to Appendix G, Section 11.C of the CGP, over all areas of the site that have not been finally stabilized.
- ☐ Coverage under an alternative NPDES permit has been obtained.
- ☐ For residential construction only, temporary stabilization has been completed and the residence has been transferred to the homeowner.

**II. Operator Information**

Name:

IRS Employer Identification Number (EIN):  -

**Mailing Address:**

Street:

City:  State:  Zip Code:  -

Phone:  -  -  Fax (optional):  -  -

E-mail:

**III. Project/Site Information**

Project/Site Name:

Project Street/Location:

City:  State:  Zip Code:  -

County or similar government subdivision:

**IV. Certification Information**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: \_\_\_\_\_

Print Title: \_\_\_\_\_

Email: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Instructions for Completing EPA Form 3510-13

**Notice of Termination (NOT) of Coverage Under an NPDES General Permit for Stormwater Discharges Associated with Construction Activity**

NPDES Form

This Form Replaces Form 3517-7 (8-98)

Form Approved OMB Nos. 2040-0086 and 2040-0211

**Who May File an NOT Form**

Permittees who are presently covered under the EPA-issued National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction Activity may submit an NOT form when final stabilization has been achieved on all portions of the site for which you are responsible; another operator has assumed control in accordance with Appendix G, Section 11.C of the General Permit over all areas of the site that have not been finally stabilized; coverage under an alternative NPDES permit has been obtained; or for residential construction only, temporary stabilization has been completed and the residence has been transferred to the homeowner.

"Final stabilization" means that all soil disturbing activities at the site have been completed and that a uniform perennial vegetative cover with a density of at least 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed. See "final stabilization" definition in Appendix A of the Construction General Permit for further guidance where background native vegetation covers less than 100 percent of the ground, in arid or semi-arid areas, for individual lots in residential construction, and for construction projects on land used for agricultural purposes.

**Completing the Form**

Type or print, using uppercase letters, in the appropriate areas only. Please place each character between the marks. Abbreviate if necessary to stay within the number of characters allowed for each item. Use only one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions about this form, refer to [www.epa.gov/npdes/stormwater/cgp](http://www.epa.gov/npdes/stormwater/cgp) or telephone the Stormwater Notice Processing Center at (866) 352-7755. Please submit original document with signature in ink - do not send a photocopied signature.

**Section I. Permit Number**

Enter the existing NPDES Stormwater General Permit Tracking Number assigned to the project by EPA's Stormwater Notice Processing Center. If you do not know the permit tracking number, refer to [www.epa.gov/npdes/stormwater/cgp](http://www.epa.gov/npdes/stormwater/cgp) or contact the Stormwater Notice Processing Center at (866) 352-7755.

Indicate your reason for submitting this Notice of Termination by checking the appropriate box. Check only one:

*Final stabilization has been achieved on all portions of the site for which you are responsible.*

*Another operator has assumed control according to Appendix G, Section 11.C over all areas of the site that have not been finally stabilized.*

*Coverage under an alternative NPDES permit has been obtained.*

*For residential construction only, if temporary stabilization has been completed and the residence has been transferred to the homeowner.*

**Section II. Operator Information**

Provide the legal name of the person, firm, public organization, or any other entity that operates the project described in this application and is covered by the permit tracking number identified in Section I. The operator of the project is the legal entity that controls the site operation, rather than the site manager. Provide the employer identification number (EIN from the Internal Revenue Service; IRS). If the applicant does not have an EIN enter "NA" in the space provided. Enter the

complete mailing address, telephone number, and email address of the operator. Optional: enter the fax number of the operator.

**Section III. Project/Site Information**

Enter the official or legal name and complete street address, including city, state, zip code, and county or similar government subdivision of the project or site. If the project or site lacks a street address, indicate the general location of the site (e.g., Intersection of State Highways 61 and 34). Complete site information must be provided for termination of permit coverage to be valid.

**Section IV. Certification Information**

All applications, including NOIs, must be signed as follows:  
*For a corporation:* By a responsible corporate officer. For the purpose of this Part, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

*For a partnership or sole proprietorship:* By a general partner or the proprietor, respectively; or

*For a municipality, state, federal, or other public agency:* By either a principal executive officer or ranking elected official. For purposes of this Part, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA).

Include the name, title, and email address of the person signing the form and the date of signing. An unsigned or undated NOT form will not be considered valid termination of permit coverage.

**Paperwork Reduction Act Notice**

Public reporting burden for this application is estimated to average 0.5 hours per notice, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form including any suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, 2136, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460. Include the OMB number on any correspondence. Do not send the completed form to this address.

Visit this website for mailing instruction:

[www.epa.gov/npdes/stormwater/mail](http://www.epa.gov/npdes/stormwater/mail)

Visit this website for instructions on how to submit electronically:

[www.epa.gov/npdes/stormwater/enoi](http://www.epa.gov/npdes/stormwater/enoi)





#### IV. SWPPP Information

Has the SWPPP been prepared in advance of filing this NOI? ☐ Yes ☐ No

Location of SWPPP for viewing: ☐ Address in Section II ☐ Address in Section III ☐ Other

If Other:

SWPPP Street:

City:

State:  Zip Code:  -

SWPPP Contact Information (if different than that in Section II):

Name:

Phone:  -  -  Fax (optional):  -  -

E-mail (optional):

#### V. Discharge Information

Identify the name(s) of waterbodies to which you discharge.

Is this discharge consistent with the assumptions and requirements of applicable EPA approved or established TMDL(s)?

☐ Yes ☐ No

#### VI. Endangered Species Information

Under which criterion of the permit have you satisfied your ESA eligibility obligations?

☐ A ☐ B ☐ C ☐ D ☐ E ☐ F

• If you select criterion F, provide permit tracking number of operator under which you are certifying eligibility:

#### VII. Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name:

Print Title:

Signature:

Date:

**Notice of Intent (NOI) for Storm Water Discharges Associated with  
Construction Activity Under an NPDES General Permit**

NPDES Form

This Form Replaces Form 3510-9 (8/98)

Form Approved OMB Nos. 2040-0188 and 2040-0211

**Who Must File an NOI Form**

Under the provisions of the Clean Water Act, as amended (33 U.S.C. 1251 et seq.; the Act), federal law prohibits storm water discharges from certain construction activities to waters of the U.S. unless that discharge is covered under a National Pollutant Discharge Elimination System (NPDES) Permit. Operator(s) of construction sites where one or more acres are disturbed, smaller sites that are part of a larger common plan of development or sale where there is a cumulative disturbance of at least one acre, or any other site specifically designated by the Director, must submit an NOI to obtain coverage under an NPDES general permit. Each person, firm, public organization, or any other entity that meets either of the following criteria must file this form: (1) they have operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or (2) they have day-to-day operational control of those activities at the project necessary to ensure compliance with SWPPP requirements or other permit conditions. If you have questions about whether you need an NPDES storm water permit, or if you need information to determine whether EPA or your state agency is the permitting authority, refer to [www.epa.gov/npdes/stormwater/cgp](http://www.epa.gov/npdes/stormwater/cgp) or telephone the Storm Water Notice Processing Center at (866) 352-7755.

**Where to File NOI Form**

See the applicable CGP for information on where to send your completed NOI form.

**Completing the Form**

Obtain and read a copy of the appropriate EPA Storm Water Construction General Permit for your area. To complete this form, type or print, using uppercase letters, in the appropriate areas only. Please place each character between the marks (abbreviate if necessary to stay within the number of characters allowed for each item). Use one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions on this form, refer to [www.epa.gov/npdes/stormwater/cgp](http://www.epa.gov/npdes/stormwater/cgp) or telephone the Storm Water Notice Processing Center at (866) 352-7755. Please submit original document with signature in ink - do not send a photocopied signature.

**Section I. Permit Number**

Provide the number of the permit under which you are applying for coverage (see Appendix B of the general permit for the list of eligible permit numbers).

**Section II. Operator Information**

Provide the legal name of the person, firm, public organization, or any other entity that operates the project described in this

application. An operator of a project is a legal entity that controls at least a portion of site operations and is not necessarily the site manager. Provide the employer identification number (EIN from the Internal Revenue Service; IRS), also commonly referred to as your taxpayer ID. If the applicant does not have an EIN enter "NA" in the space provided. Also provide the operator's mailing address, telephone number, fax number (optional) and e-mail address (if you would like to be notified via e-mail of NOI approval when available). Correspondence for the NOI will be sent to this address.

**Section III. Project/Site Information**

Enter the official or legal name and complete street address, including city, state, zip code, and county or similar government subdivision of the project or site. If the project or site lacks a street address, indicate the general location of the site (e.g., Intersection of State Highways 61 and 34). Complete site information must be provided for permit coverage to be granted.

The applicant must also provide the latitude and longitude of the facility either in degrees, minutes, seconds; degrees, minutes, decimal; or decimal format. The latitude and longitude of your facility can be determined in several different ways, including through the use of global positioning system (GPS) receivers, U.S. Geological Survey (U.S.G.S.) topographic or quadrangle maps, and EPA's web-based siting tools, among others. Refer to [www.epa.gov/npdes/stormwater/cgp](http://www.epa.gov/npdes/stormwater/cgp) for further guidance on the use of these methodologies. For consistency, EPA requests that measurements be taken from the approximate center of the construction site. Applicants must specify which method they used to determine latitude and longitude. If a U.S.G.S. topographic map is used, applicants are required to specify the scale of the map used.

Indicate whether the project is in Indian country, and if so, provide the name of the Reservation. If the project is in Indian Country Lands that are not part of a Reservation, indicate "not applicable" in the space provided.

Enter the estimated construction start and completion dates using four digits for the year (i.e., 05/27/1998). Enter the estimated area to be disturbed including but not limited to: grubbing, excavation, grading, and utilities and infrastructure installation. Indicate to the nearest quarter acre. Note: 1 acre = 43,560 sq. ft.

**Section IV. SWPPP Information**

Indicate whether or not the SWPPP was prepared in advance of filing the NOI form. Check the appropriate box for the location where the SWPPP may be viewed. Provide the name,

**Notice of Intent (NOI) for Storm Water Discharges Associated with  
Construction Activity Under an NPDES General Permit**

NPDES Form

This Form Replaces Form 3510-9 (8/98)

Form Approved OMB Nos. 2040-0188 and 2040-0211

fax number (optional), and e-mail address (optional) of the contact person if different than that listed in Section II of the NOI form.

**Section V. Discharge Information**

Enter the name(s) of receiving waterbodies to which the project's storm water will discharge. These should be the first bodies of water that the discharge will reach. (Note: If you discharge to more than one waterbody, please indicate all such waters in the space provided and attach a separate sheet if necessary.) For example, if the discharge leaves your site and travels through a roadside swale or a storm sewer and then enters a stream that flows to a river, the stream would be the receiving waterbody. Waters of the U.S. include lakes, streams, creeks, rivers, wetlands, impoundments, estuaries, bays, oceans, and other surface bodies of water within the confines of the U.S. and U.S. coastal waters. Waters of the U.S. do not include man-made structures created solely for the purpose of wastewater treatment. U.S. Geological Survey topographical maps may be used to make this determination. If the map does not provide a name, use a format such as "unnamed tributary to Cross Creek". If you discharge into a municipal separate storm sewer system (MS4), you must identify the waterbody into which that portion of the storm sewer discharges. That information should be readily available from the operator of the MS4.

Indicate whether your storm water discharges from construction activities will be consistent with the assumptions and requirements of applicable EPA approved or established TMDL(s). To answer this question, refer to [www.epa.gov/npdes/stormwater/cgp](http://www.epa.gov/npdes/stormwater/cgp) for state- and regional-specific TMDL information related to the construction general permit. You may also have to contact your EPA regional office or state agency. If there are no applicable TMDLs or no related requirements, please check the "yes" box in the NOI form.

**Section VI. Endangered Species Information**

Indicate for which criterion (i.e., A, B, C, D, E, or F) of the permit the applicant is eligible with regard to protection of federally listed endangered and threatened species, and designated critical habitat. See Part 1.3.C.6 and Appendix C of the permit. If you select criterion F, provide the permit tracking number of the operator under which you are certifying eligibility. The permit tracking number is the number assigned to the operator by the Storm Water Notice Processing Center after EPA acceptance of a complete NOI.

**Section VII. Certification Information**

All applications, including NOIs, must be signed as follows:

*For a corporation:* By a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means:

(i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

*For a partnership or sole proprietorship:* By a general partner or the proprietor, respectively; or

*For a municipality, state, federal, or other public agency:* By either a principal executive officer or ranking elected official. For purposes of this Part, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA).

Include the name and title of the person signing the form and the date of signing. An unsigned or undated NOI form will not be considered eligible for permit coverage.

**Paperwork Reduction Act Notice**

Public reporting burden for this application is estimated to average 3.7 hours. This estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Chief, Information Policy Branch 2136, U.S. Environmental Protection, Agency, 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460. Include the OMB control number on any correspondence. Do not send the completed form to this address.

## **Appendix D**

# **Noise Analysis Equations**

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## Projected Noise Levels

The logarithmic equation used to compute projected noise levels is:

$$Lp1 = Lp2 + 10\log(U.F.) - 20\log(d1/d2) - Ae:$$

where:

Lp1 = the average noise level (dBA) at a noise sensitive receptor due to the operation of a unit of equipment throughout the day;

Lp2 = the equipment noise level (dBA) at a reference distance (d2);

U.F. = a usage factor that accounts for a fraction of time an equipment unit is in use throughout the day;

d1 = the distance from the receiver to the unit of equipment in feet;

d2 = the distance at which equipment noise level data is known (reference distance = 50 feet); and

Ae = noise attenuation due to transmission losses (dBA) anticipated due to a barrier (e.g., street decking structures and below-grade operation).

## Sound Level from Operation of All Equipment

The equation used to calculate the sound level resulting from the operation of all the equipment simultaneously is:

$$Leq_{total} = 10\log\left(10^{\frac{Leq_1}{10}} + 10^{\frac{Leq_2}{10}} + 10^{\frac{Leq_3}{10}} \dots etc. \right)$$

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## **Appendix E**

# **Public Comments and Newspaper Affidavit**



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A public notice was published in the *Albuquerque Journal* on June 20, 2010, inviting the public to review and comment upon the EA and FONSI (see attached affidavit). The public comment period closed on July 20, 2010. No public comments were received.

STATE OF NEW MEXICO

County of Bernalillo

SS

Bill Tafoya, being duly sworn, declares and says that he is Classified Advertising Manager of **The Albuquerque Journal**, and that this newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Session Laws of 1937, and that payment therefore has been made of assessed as court cost; that the notice, copy of which is hereto attached, was published in said paper in the regular daily edition, for 1 times, the first publication being on the 20<sup>th</sup> day of June, 2010, and the subsequent consecutive publications on \_\_\_\_\_, 20\_\_\_\_.

Sworn and subscribed to before me, a Notary Public, in and for the County of Bernalillo and State of New Mexico this 29<sup>th</sup> day of June of 2010.

PRICE

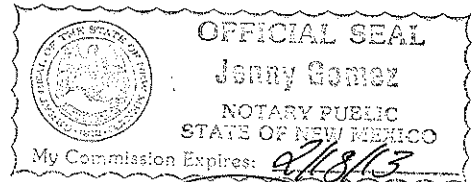
\$731.60 + Vax

Statement to come at end of month.

ACCOUNT NUMBER

A28021

CLA-22-A (R-1/93)



## PUBLIC NOTICE

### NOTICE OF AVAILABILITY ENVIRONMENTAL ASSESSMENT OF PROPOSED ACTIONS BY ARMY AND AIR FORCE EXCHANGE SERVICE AT KIRTLAND AIR FORCE BASE, NM

The Army and Air Force Exchange Service (AAFES), in cooperation with the Air Force, has proposed a Finding of No Significant Impact (FONSI) based upon an Environmental Assessment (EA) concerning the construction of a new 95,421-square-foot Shopping Center at Kirtland Air Force Base (Kirtland AFB) in Albuquerque, NM. The EA evaluates the potential impacts on environmental and human resources that would result from the proposed construction at Kirtland AFB.

The EA and draft Finding of No Significant Impact (FONSI) are available for public review at Central New Mexico Community College Montoya Campus Library, 4700 Morris NE; Kirtland Air Force Base Library, Building 20204; and on-line at <http://www.kirtland.af.mil/>. For additional information or to make comments, contact: National Environmental Policy Act Program Manager, 377 MSG/CEANQ, 2050 Wyoming Blvd SE, Suite 125, Kirtland AFB, NM 87117-5270 or [NEPA@kirtland.af.mil](mailto:NEPA@kirtland.af.mil). Comments are due by July 20, 2010.

THE

# **Appendix F**

## **Finding of No Significant Impact (FONSI)**

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# **FINDING OF NO SIGNIFICANT IMPACT**

## **Environmental Assessment for the Construction and Operation of a Shopping Center at Kirtland Air Force Base, Albuquerque, Bernalillo County, New Mexico**

Pursuant to the National Environmental Policy Act (NEPA) of 1969 (Public Law 91-190, 42 United States Code §4321 et. seq.); the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 Code of Federal Regulations §§1500-1508); and the Department of the Air Force “Environmental Impact Analysis Process” (Air Force Instruction 32-7061), the United States Air Force prepared an Environmental Assessment (EA) analyzing the potential impacts of the construction and operation of a new Shopping Center. The *Environmental Assessment for the Construction and Operation of a Shopping Center at Kirtland Air Force Base, Albuquerque, Bernalillo County, New Mexico* is incorporated by reference and this Finding of No Significant Impact (FONSI) summarizes the results of that evaluation.

### **Purpose and Need for the Proposed Action**

The Army and Air Force Exchange Service (AAFES) proposes to construct and operate a new Shopping Center at Kirtland Air Force Base (Kirtland AFB) in Albuquerque, Bernalillo County, New Mexico. The purpose of the action is to better serve the needs of the military community through the improvement of shopping and other services by replacing the existing Base Exchange (BX) and Mini-Mall facilities with one facility that consolidates the services currently offered at these two facilities. The existing BX and Mini-Mall are aged, undersized, and obsolete facilities that cannot be upgraded to meet current building standards.

The need for this action is to provide consolidated, centrally located facilities on Kirtland AFB where authorized customers can obtain multiple services at a single location. This would increase customer convenience by reducing the need to travel off-Base and allowing customers to make a single stop for multiple services. In addition, building improvements would increase energy efficiency and reduce overall operational costs.

### **Description of Proposed Action and Alternative**

#### **Proposed Action**

AAFES proposes to construct and operate a new 95,421-square-foot Shopping Center on a portion of Pennsylvania Street between the existing Commissary and the existing BX. The Proposed Action involves construction of the new Shopping Center, demolition of the existing satellite pharmacy (Building 20167), closure of a portion of Pennsylvania Street, and construction of a new road behind the existing BX and proposed Shopping Center. Additionally, underground utilities located beneath Pennsylvania Street and the proposed new Shopping Center footprint would require relocation.

Construction would consist of a reinforced concrete slab/foundation with steel or concrete framing, including complete mechanical, electrical, and life/safety systems. The proposed facility would be designed and built in accordance with Leadership in Energy and Environmental Design (LEED) Silver-New Construction (NC) standards; however, AAFES does not intend to pursue LEED-NC certification for this facility. The proposed facility would connect to existing utility services and communications systems and would provide for pavement, walks, curbs, gutters, storm drainage, retention walls, and other site improvements, as necessary. The Proposed Action involves a Shopping Center containing a main store, military clothing sales store, pharmacy, retail laundry/drycleaning services, a beauty/barber shop, concession kiosks, other similar services, and a food court including Taco

Bell, Charley's, Anthony's, Manchu Wok, and Starbucks. New construction would be in accordance with all applicable Department of Defense Unified Facilities Criteria provisions. Demolition and construction is expected to last approximately 18 months.

### **No-Action Alternative**

Under the No Action Alternative, AAFES would not construct the new Shopping Center, would not demolish the existing satellite pharmacy, and would not build a new Texas Street by-pass road. As a result, Kirtland AFB would continue to use the existing AAFES BX facility, which is located north of Gibson Boulevard between Pennsylvania and Texas Streets, and the existing Mini-Mall, which is located south of Gibson Boulevard, at the southwest corner of F Avenue and 1<sup>st</sup> Street. Use of these facilities would result in the continued provision of inadequate services for authorized personnel in outdated facilities that have exceeded their useful life.

## **Anticipated Environmental Consequences**

### **Proposed Action**

The potential consequences associated with this action are not significant in nature. The Proposed Action would have negligible impacts on biological resources and air quality, would not be expected to generate any hazardous materials or wastes, would not disproportionately affect minorities or low-income populations, and would not impact any cultural resources. Potential consequences to land use, airspace and aircraft operations, and climate were not evaluated in detail because there would be no impacts. Impacts to other resources are summarized below.

**Traffic.** Construction activities would result in a slight increase to traffic volume in the project area due to on-road use by construction equipment, construction workforce vehicles, and vehicles delivering construction materials. To minimize these impacts, the contractor would encourage construction workers to carpool to the site and would schedule truck trips at intervals over the entire working day, thereby evenly distributing these trips over the existing roadways and avoiding peak-hour traffic times.

Because the number of personnel assigned to Kirtland AFB would not be expected to increase, there would be no associated increase in the number of entries and exits to the Base since the facilities would only be utilized by on-Base personnel. However, existing on-Base trips would likely be redistributed over the existing roadway network, increasing the number of trips to this portion of the Base. Project design calls for the closure of a portion of Pennsylvania Street, and the extension of the new Texas Street by-pass to mitigate this closure. Because the proposed action results in the consolidation of services that are currently dispersed across the Base, traffic may increase slightly to the project area, but overall internal trips on the Base roadway network may decrease. Therefore, the proposed construction and operation of this facility would have negligible impacts to traffic at Kirtland AFB.

**Visual Resources.** During construction, the project site would have little aesthetic appeal. Ground disturbance and construction equipment would be partially visible from the surrounding area. Upon completion of construction, the project site would consist of an urban environment containing the existing Commissary and BX, a new Shopping Center building, existing parking areas, a new Texas Street by-pass, and landscaping. Over the long-term, visual and aesthetic impacts at the proposed project site would be anticipated to be positive with the conversion of the current divided shopping area to a pedestrian-friendly Shopping Center consistent with the design standards specified in the *Kirtland Air Force Base Architectural Compatibility Plan*.

**Topography, Geology, and Soils.** During construction, soil material and rocks would be excavated, compacted, and graded, and existing asphalt and vegetation would be removed as part of site preparation. These construction activities may result in a short-term increase in soil erosion and sediment transport, which will be minimized through the use of hay bales, silt fences, and phasing of construction.

Due to the close proximity of the buildings, care will be taken not to undermine the foundations of the existing structures. No long-term impacts to topography, geology, or soils are anticipated.

**Utilities and Infrastructure.** Kirtland AFB is the owner and operator of the electric, potable water, natural gas, and sanitary sewer and stormwater collection utilities. Each of these utilities has sufficient supply and/or capacity to serve the proposed project. The proposed project would necessitate the relocation of existing underground utilities, including an 8-inch water line; 6-inch and 8-inch natural gas lines; 10-inch to 12-inch sanitary sewer mains running north-south along Pennsylvania Avenue; and 12-inch, 18-inch, and 36-inch storm drains running mainly east-west. In addition, construction activities would likely require the removal of an abandoned water line and an abandoned gas line running the extent of the new Shopping Center footprint, as well as multiple operational underground communication manholes, ducts and direct buried lines. Prior to the relocation of any utilities, all necessary agreements would be executed with each utility company. Further, construction and relocation would be timed in such a way as to minimize disruption of natural gas service to existing customers.

**Water Resources.** No sensitive water features are located in or immediately adjacent to the Preferred Alternative site. During construction activities, the contractor will prepare a Stormwater Pollution Prevention Plan to implement best management practices (BMPs) to prevent the uncontrolled discharge of sediments and pollutants in compliance with the National Pollution Discharge Elimination System Construction General Permit. The construction of the Texas Street by-pass would add approximately 12,770 square feet of impervious surface area, which would increase the potential for long-term impacts associated with stormwater runoff. Implementation of BMPs and design measures, including the placement of culverts, swales, storm drains and inlets, and retention facilities, would limit potential short-term and long-term adverse impacts to surface water to insignificant adverse effects.

**Noise.** Construction noise modeling revealed that a worst-case scenario where all construction equipment is operating simultaneously may result in noise complaints from sensitive noise receptors near the construction area. Construction noise will be mitigated through the use of portable noise barriers, limiting heavy equipment use near sensitive noise receptors, ensuring that proper mufflers and other noise reduction equipment are in good working condition, and similar measures. Potential operational noise impacts to housing near the Texas Street by-pass may result from delivery truck traffic serving the shopping area; however, this would be mitigated through various measures, such as scheduling deliveries during daytime hours or installing a noise barrier such as a berm or wall between the by-pass and Base housing.

**Socioeconomics.** The number of personnel assigned to Kirtland AFB would not be expected to increase as a result of the Proposed Action and would not require the provision of additional services (e.g., schools). During construction activities, temporary construction jobs would be created that would be distributed throughout the Albuquerque area. These jobs would benefit the Albuquerque economy and would result in both direct and indirect revenues to the local community. In general, the long-term operation of the proposed project would likely create some job opportunities at the proposed facility, thereby resulting in a beneficial impact to the overall employment and/or income potential of residents in the Albuquerque metropolitan area.

**Protection of Children.** The closure of a portion of Pennsylvania Street and the addition of the Texas Street by-pass may result in additional traffic using Texas Street adjacent to the Gibson Child Development Center. However, there are no crosswalks on Texas Street and the Center is not typically accessed by pedestrians. All children attending the center are picked up and dropped off by their parents in designated areas within the center's campus. Construction traffic would likely use Texas Street, particularly during construction of the by-pass, but coupled with limited pedestrian traffic in the area, and scheduling of construction vehicles during off-peak hours, a short-term increase in construction-related traffic is not anticipated to cause a significant increased risk to children. Similarly, the potential increase



in traffic during operation of the proposed action is not anticipated to disproportionately risk the health or safety of children since Texas Street is not typically used for pedestrian access to the center.

**Cumulative Impacts.** Potential cumulative impacts were evaluated based on past, present, and reasonably foreseeable future actions. Results of this analysis indicate that projects associated with the 2008 Dormitory Master Plan have the greatest potential for cumulative impacts with the Proposed Action. The 2008 Dormitory Master Plan includes numerous new construction projects and associated demolitions, most of which are still in the planning process. Construction and demolition activities are anticipated to occur over several years, and currently construction has begun only on a Logistics Facility on the new Pararescue and Combat Rescue Officers Training Campus.

Cumulative impacts associated with the reasonably foreseeable future actions may result from increased construction-related traffic and operations-related traffic to the extent that personnel are being added to the Base. With the implementation of measures such as the utilization of proper equipment, implementation of BMPs, phasing of construction activities, adherence to permit requirements, and existing standard operating procedures, as well as other guidance in place at Kirtland AFB, it is anticipated that no cumulative impacts would occur.

#### **No-Action Alternative**

Under this alternative, there would be no near- or long-term changes to current land use, visual resources, air quality, noise, biological resources, traffic, or socioeconomics.

#### **Public Review**

A public notice was published in the *Albuquerque Journal* on June 20, 2010, inviting the public to review and comment upon the EA and FONSI. The public comment period closed on July 20, 2010. No public comments were received.

#### **Finding of No Significant Impact**

Based upon my review of the facts and analyses contained in the attached EA, I conclude that the Proposed Action would not have a significant environmental impact, either directly or cumulatively in conjunction with other projects at Kirtland AFB. Accordingly, the requirements of NEPA, CEQ regulations, and the Air Force "Environmental Impact Analysis Process" are fulfilled and the preparation of an Environmental Impact Statement is not required.

Accepted By:

Signature on file, Signed 3 November 2010

ROBERT L. MANESS, Colonel, USAF  
Commander

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Date